

SAMSUNG

SAMSUNG

DLP TV

Owner's Instructions

**SP-50L6HV
SP-50K3HV
SP-56K3HV
SP-61K3HV
SP-67L6HV**



This device is a Class B digital apparatus.

Register your product at www.samsung.com/global/register

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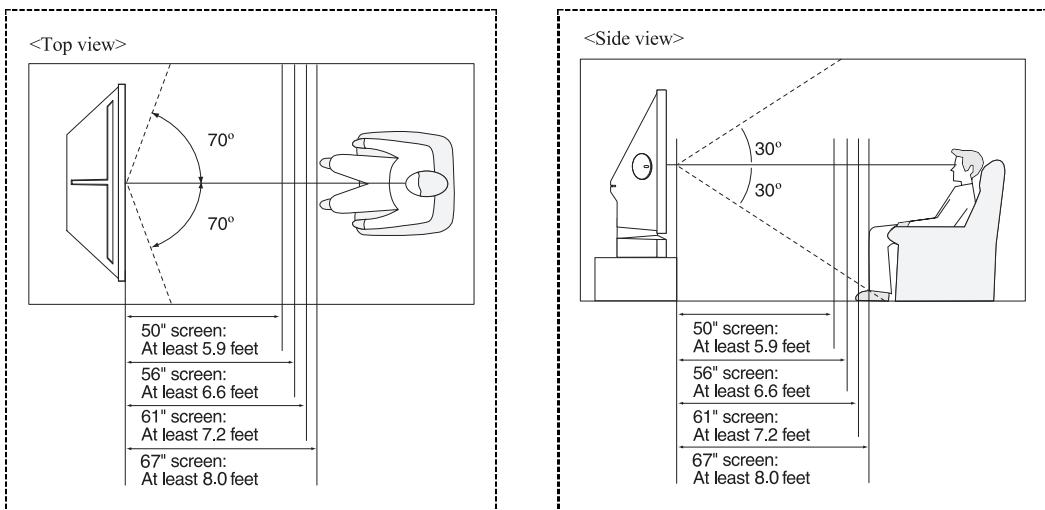


Your New Wide TV

Your New Wide TV

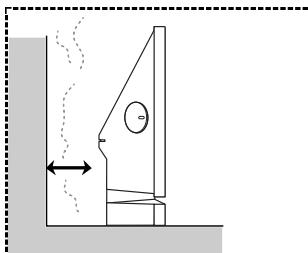
Viewing Position

To optimize your viewing comfort, please follow the guidelines below for viewing distance. If viewing for an extended period of time, sit as far back from the screen as possible.



When installing the product, make sure to keep it away from the wall (more than 10 cm/4 inches) for ventilation purposes.

- Poor ventilation may cause an increase in the internal temperature of the product, resulting in a shortened component life and degraded performance.



List of Features

Your TV was designed and engineered using the latest technology. It is a full-featured, high-performance unit that exceeds industry standards. In addition, it has these special features:

- Easy-to-operate remote control
- Easy-to-use on-screen menu system you can access from the front/right side panel or remote control
- Automatic timer to turn the TV on and off at any time you choose
- Adjustable picture and sound settings and the ability to memorize your favorite settings
- Automatic channel tuning for up to 181 channels
- A special filter to reduce or eliminate reception problems
- Fine tuning control for the sharpest picture possible
- A built-in multi-channel sound decoder for stereo and bilingual listening
- A special sleep timer
- Widescreen TV with adjustable image size
- Life-like clear images provided by DNle technology
- My Color Control Mode for corresponding with your color style
- Color Weakness Enhancement Feature
- Game Mode

Accessories

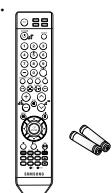
Once you have unpacked your TV, check to make sure that you have all the parts shown here. If any piece is missing or broken, call your dealer.



Owner's Instructions



Warranty Card/
Registration Card/
Safety Guide Manual/
Quick Guide Manual/



Remote Control/
AAA Batteries

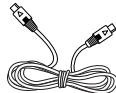


Power Cord



Cloth-Clean

The following parts are sold separately and are available at most electronics stores.



S-VIDEO Cable



HDMI Cable



HDMI/DVI cable



Component Cables (RCA)



Antenna Cable



PC Audio Cable



PC Cable

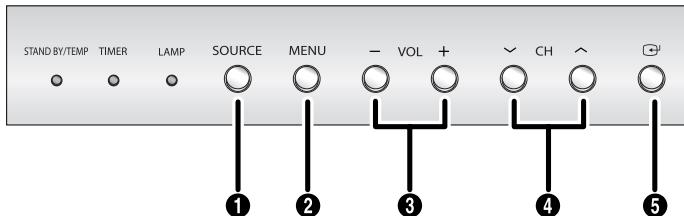
Your New Wide TV

Front/Right Side Buttons

The buttons on the front/right side panel control your TV's basic features, including the on-screen menu system. To use the more advanced features, you must use the remote control.

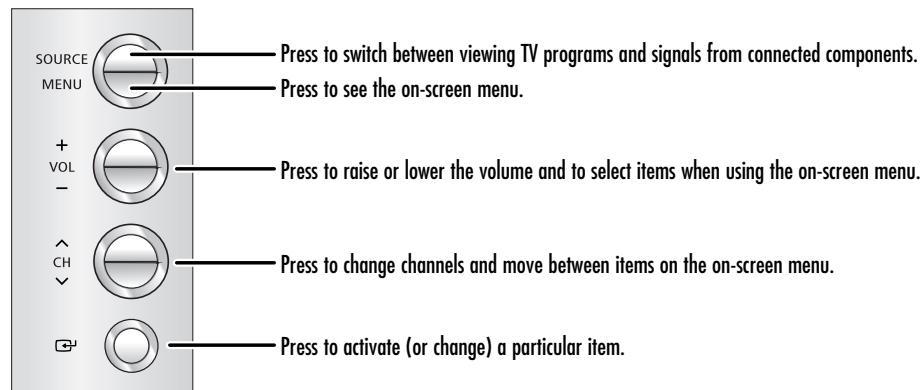
The product color and shape may vary depending on the model.

SP-50K3HV/SP-56K3HV/SP-61K3HV



- ① Press to switch between viewing TV programs and signals from connected components.
- ② Press to see the on-screen menu.
- ③ Press to raise or lower the volume and to select items when using the on-screen menu.
- ④ Press to change channels and move between items on the on-screen menu.
- ⑤ Press to activate (or change) a particular item.

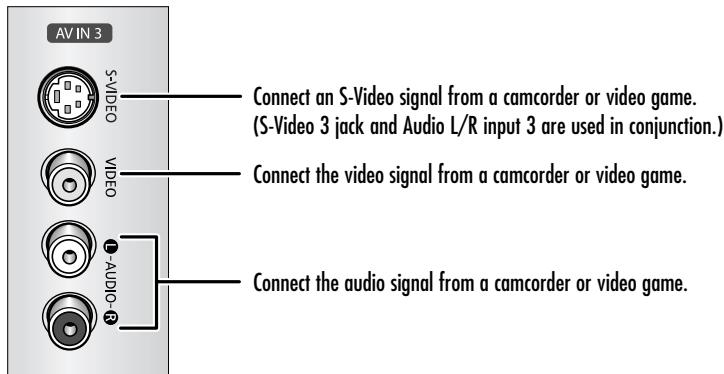
SP-50L6HV/SP-67L6HV



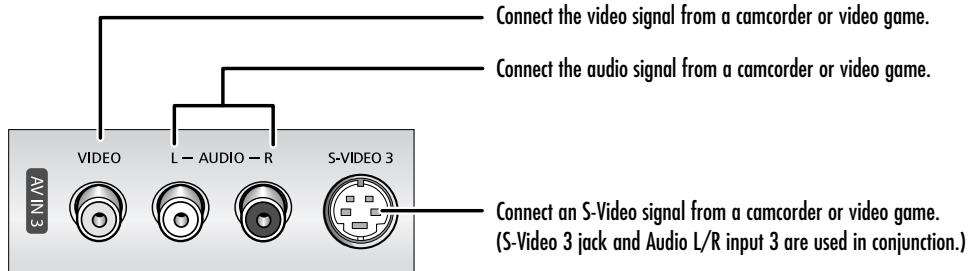
Side Panel Jacks

Use the right side panel jacks to connect a component that is used only occasionally (a camcorder or video game, for example). The product color and shape may vary depending on the model.

SP-50K3HV/SP-56K3HV/SP-61K3HV



SP-50L6HV/SP-67L6HV

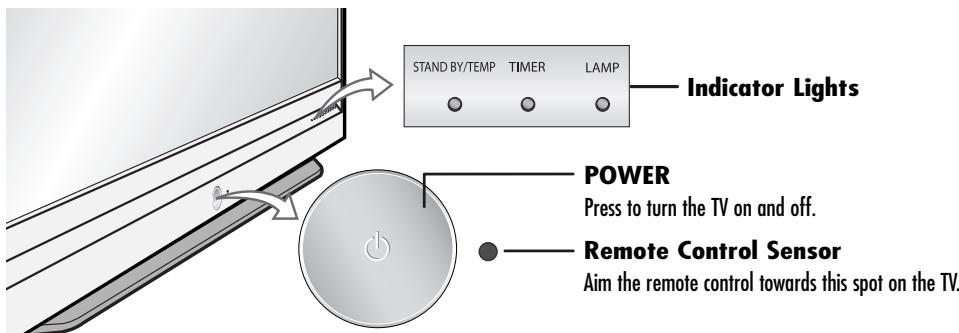


Your New Wide TV

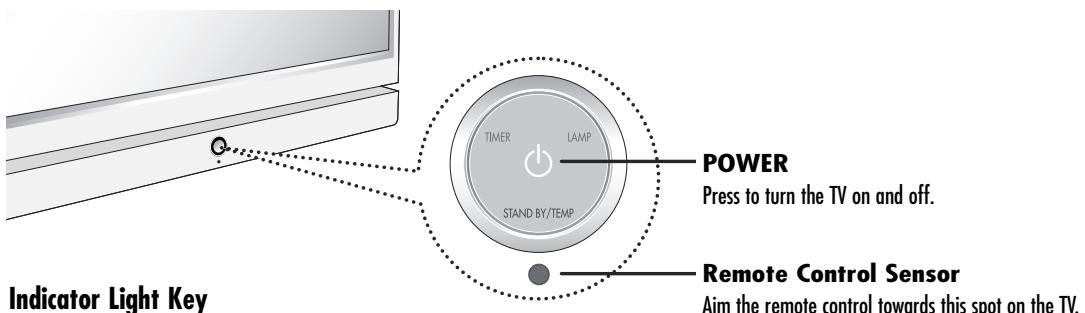
Front Panel LED Indicators

The three lights on the front panel indicate the status of your TV.
The product color and shape may vary depending on the model.

SP-50K3HV/SP-56K3HV/SP-61K3HV



SP-50L6HV/SP-67L6HV



Indicator Light Key

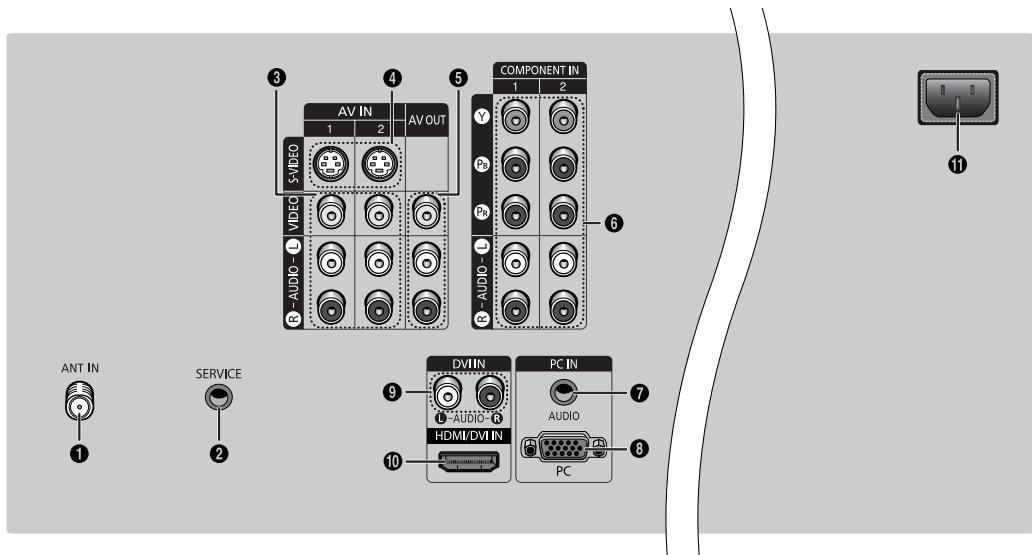
- : Light is On
- : Light is Blinking
- : Light is Off

TIMER	LAMP	STAND BY/TEMP	Indication
○	○	●	Standby mode.
●	○	○	A timer pilot lights when Timer Auto On or Off is selected.
○	○	○	Normal operation.
●	○	○	Normal operation (when Timer Auto On or Off is selected).
○	●	○	Lamp is warming up. The normal picture comes on after 25 seconds.
●	●	○	The normal picture comes on after 25 seconds. (when Timer Auto On or Off is selected)
○	●	●	Air vent cover in the rear of the TV is not properly installed.
○	○	●	Inside temperature of the TV is over normal. Clean the air vent cover in the rear of the TV. Turn the TV back on after 1 hour.
●	●	●	The lamp does not work, please contact an authorized Service Center for assistance.

- It takes about 30 seconds for the TV to warm up, so normal brightness may not appear immediately.
- The TV has a fan to keep the inside lamp from overheating. You'll occasionally hear it working.

Rear Panel Jacks

Use the rear panel jacks to connect components such as a VCR. You can connect different components such as VCRs, Set-Top Box and a DVD player etc., because there are two sets of video input jacks and two sets of component video input jacks on the rear panel of your TV. For more information, see "Connections".



① ANTENNA terminal

Connect the cable or antenna in "ANT IN" terminal to receive a signal from VHF/UHF antenna (Air) or your cable system. (Refer to pages 16~18)

② SERVICE

This jack is for service only.

③ VIDEO/AUDIO input jacks

Connect video/audio signals from external sources, such as VCR or DVD players. (Refer to pages 19~21)

④ S-VIDEO input jacks

Connects an S-Video signal from an S-VHS VCR or DVD player. (Refer to pages 19~20)

⑤ VIDEO/AUDIO output jacks

Sends video/audio signals from the TV to an external source, such as a VCR. These jacks are available only in TV, Video and S-Video modes. (Refer to pages 19 and 23)

⑥ COMPONENT IN 1, 2 jacks (Y, Pb, Pr, AUDIO L/R)

Use these jacks to connect the component video/audio signals from a DVD player or a Set-Top Box. (Refer to pages 21~22)

⑦ PC AUDIO Input jack

Connect these to the audio output jack on your PC. (Refer to page 86)

⑧ PC VIDEO Input jack

Connect these to the video output jack on your PC.

⑨ DVI (Digital Video Interface) AUDIO input jacks

Connect to the digital audio output jacks of a device with DVI output. (Refer to page 23)

⑩ HDMI (High Definition Multimedia Interface)/DVI Input jack (HDMI/DVI IN)

Connect to the HDMI jack of a device with HDMI output. This input can also be used as a DVI connection with separate analog audio inputs. An optional HDMI/DVI cable will be necessary to make this connection. When using the optional HDMI/DVI adapter, the DVI analog audio inputs on your TV allow you to receive left and right audio from your DVI device. (Not compatible with PC) (Refer to page 22)

⑪ POWER IN

Connect the supplied power cord.

Your New Wide TV

Remote Control

You can use your remote control within a distance of 23 feet and an angle of 30 degrees from the left and right sides of the TV's remote control receiver. You can also use your remote control to operate your VCR, Cable box, DVD player and Set-top box. See pages 34~40 for details.

- 1. POWER**
Turns the TV on and off.
- 2. Channel Number**
Press to directly tune to a particular channel.
- 3. -**
Press to select additional channels (digital and analog) being broadcast by the same station. For example, to select channel "54-3", press "54", then press "-" and "3".
- 4. ANTENNA**
Press to select "AIR" or "CABLE".
- 5. CH MGR**
Used to display Channel Lists on the screen.
- 6. VCR/DVD Controls**
Controls VCR or DVD functions: Rewind, Stop, Play/Pause, Fast Forward.
- 7. VOL +, VOL -**
Press to increase or decrease the volume.
- 8. MUTE**
Press to mute the TV sound.
- 9. MENU**
Displays the main on-screen menu.
- 10. ▲, ▼, ◀, ▶, ENTER**
Press to select highlight up, down, left, or right. While using the on-screen menus, press ENTER to activate (or change) a particular item.
- 11. INFO**
Press to display information on the TV screen.
- 12. PIP (Picture In Picture)**
Displays the available channels in sequence. (These buttons change channels in the PIP window only.)
- 13. S.MODE**
Select Sound effect. (Refer to page 73)
- 14. P.MODE**
Adjust the TV picture by selecting one of the preset factory settings (or select your personal, customized picture settings.) (Refer to page 54)
- 15. MTS (Multichannel Television Stereo)**
Press to choose Stereo, SAP(Secondary Audio Program) or Mono.
- 16. CAPTION**
Controls the caption decoder.

17. Mode (TV/DVD/STB/CABLE/VCR)
Selects a target device to be controlled by the Samsung remote control (i.e., TV, DVD, STB, CABLE, or VCR).

18. SOURCE
Press to display all of the available video sources (TV, AV1, AV2, AV3, S-Video1, S-Video2, S-Video3, Component1, Component2, PC, HDMI).

19. PRE-CH
Tunes to the previous channel.

20. DNle (Digital Natural Image engine)
Activates DNle Demo mode.
(Refer to page 59)

21. SLEEP
Press to select a preset time interval for automatic shut off.
(Refer to page 43)

22. CH ▲/▼
Press to change channels.

23. EXIT
Press to exit the menu.

24. SRS
Activates TruSurround. (Refer to page 77)

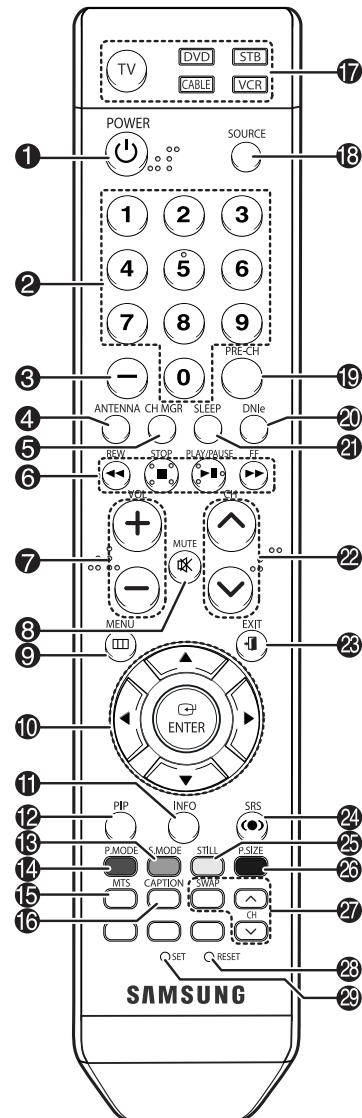
25. STILL
Press to pause the current screen.
(Refer to page 69)

26. P.SIZE
Press to change the screen size.
(Refer to page 57)

27. PIP control buttons
SWAP: Interchange the main and sub picture. (Refer to page 65)
CH ▲/▼: Press to display the available channels in sequence. (These buttons change channels in the PIP window only.)
(Refer to page 68)

28. RESET
If your remote control is not functioning properly, take out the batteries and press the reset button for about 2~3 seconds. Re-insert the batteries and try using the remote control again.

29. SET
Used during set up of this remote control, so that it will work compatibly with other devices (Set-top box, VCR, Cable box, DVD, etc.)



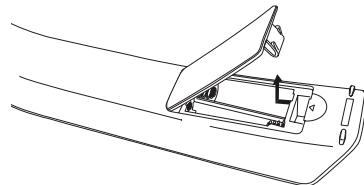
NOTE

- *This is a special remote control for the visually impaired, and has Braille points on the POWER, VOL +, VOL -, CH ^/~, STOP, and PLAY/PAUSE buttons.*

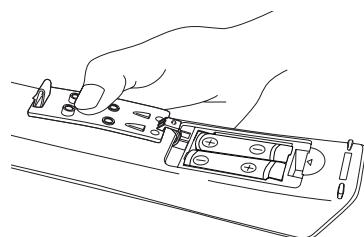
Installing Batteries in the Remote Control

With normal use, the batteries in the remote control should last about a year. If you notice a performance degradation while using the remote, the batteries may need to be replaced. Make sure you replace both batteries and do not mix old and new batteries in the remote control. If you won't be using the remote control for a long time, remove the batteries and store them in a cool, dry place.

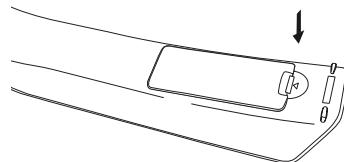
1 Lift the cover at the back of the remote control upward as shown in the figure.



2 Install two AAA size batteries. Make sure to match the "+" and "-" ends of the batteries with the diagram inside the compartment.



3 Close the cover as shown in the figure.



NOTE

- Do not mix battery types, i.e, alkaline and manganese.

GOALS
SWING
SWING
SWING
SWING
SWING
SWING
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SWING



Connections

Connections

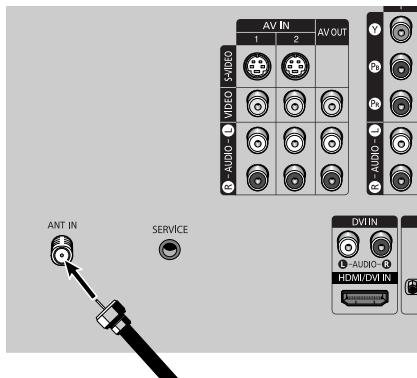
Connecting VHF and UHF Antennas

If you do not have a cable system, you will need to connect an antenna to your TV.

Antennas with 75-ohm Round Leads

If your antenna looks like this:  it has 75-ohm round leads.

- 1 Plug the antenna lead into the ANT IN on the rear panel of your TV.

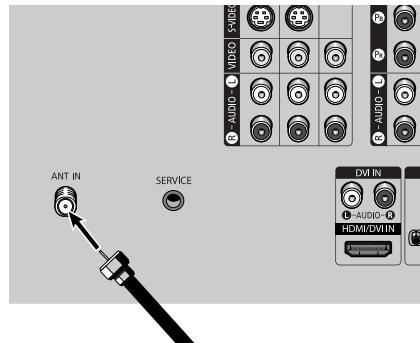


Connecting Cable TV

You can connect different cable systems to your TV, including cable without a Cable box, and cable with a Cable box that descrambles some or all channels.

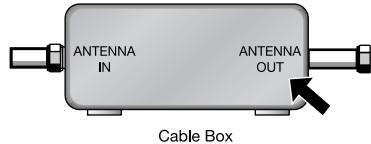
Cable without a Cable Box

- 1 Plug the incoming cable into the ANT IN on the rear panel of your TV.

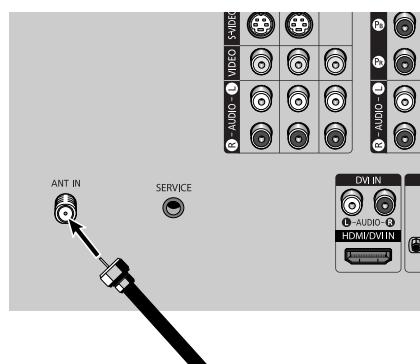


Cable with a Cable Box that Descrambles All Channels

- 1 Find the cable connected to the ANTENNA OUT terminal on your Cable box. This terminal might be labeled "ANT OUT", "VHF OUT" or simply "OUT".



- 2 Connect the other end of the cable to the "ANT IN" terminal on the rear panel of your TV.

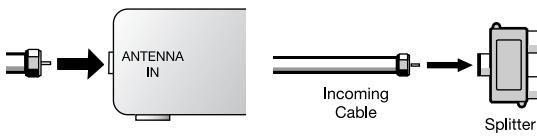


Connections

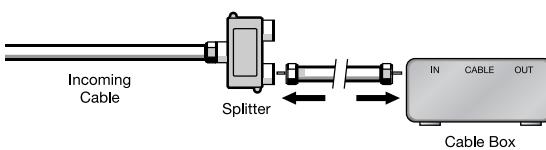
Cable with a Cable Box that Descrambles Some (But Not All) Channels

To complete this connection you will need a two-way splitter, an RF (A/B) switch, and four coaxial cables (which you can buy from your Samsung dealer or any electronics store).

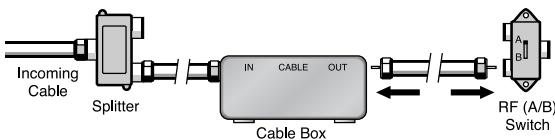
- 1 Find and disconnect the cable that is connected to the ANTENNA IN terminal of your Splitter. This terminal might be labeled "ANT IN", "VHF IN" or simply, "IN". Connect this cable to a two-way splitter.



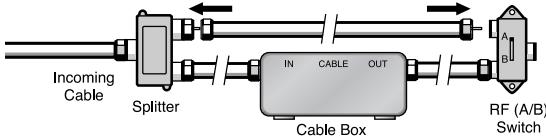
- 2 Connect a coaxial cable between an OUT terminal of the splitter and the IN terminal of the Cable box.



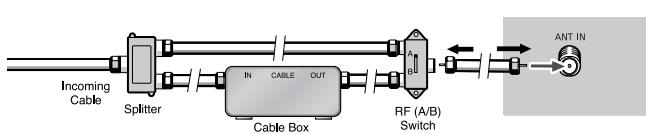
- 3 Connect a coaxial cable between the ANTENNA OUT terminal of the Cable box and the B-IN terminal of the RF (A/B) switch.



- 4 Connect another cable between the other OUT terminal on the splitter and the A-IN terminal on the RF (A/B) switch.



- 5 Connect the last coaxial cable between the OUT terminal of the RF (A/B) switch and the ANT IN on the TV.



After you've made this connection, set the A/B switch to the "A" position for normal viewing. Set the A/B switch to the "B" position to view scrambled channels. (When you set the A/B switch to "B", you will need to tune your Set-Top Box to the Cable box's output channel, which is usually channel 3 or 4.)

Connecting a VCR

Connecting a VCR to the Video or S-Video/Audio jack

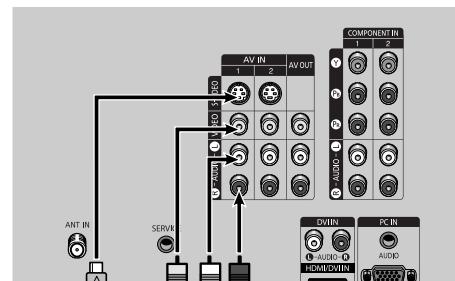
1 Connect a video cable between the VIDEO IN (1 or 2) (or S-VIDEO IN) jack on the TV and the VIDEO (or S-VIDEO) output jack on the VCR.

2 Connect a set of audio cables between the AUDIO IN (1 or 2) jacks on the TV and the AUDIO output jacks on the VCR.

NOTES

- For better video, use an S-Video cable.
- Please be sure to match the color coded input terminals and cable jacks.

TV Rear Panel



Incoming
Cable or
Antenna



Stereo VCR

Connecting a Second VCR to Record from the TV

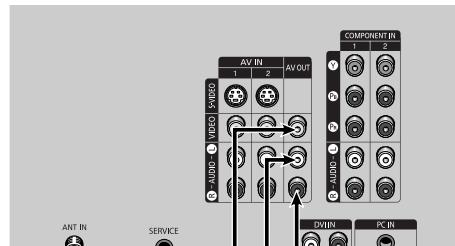
1 Connect a video cable between the VIDEO OUT jack on the TV and the VIDEO input jack on the VCR.

2 Connect a set of audio cables between the AUDIO OUT jacks on the TV and the AUDIO input jacks on the VCR.

NOTES

- Refer to your VCR's instructions for more information about how to record using this kind of connection.
- Please be sure to match the color coded input terminals and cable jacks.

TV Rear Panel



Incoming
Cable or
Antenna



Stereo VCR

Connections

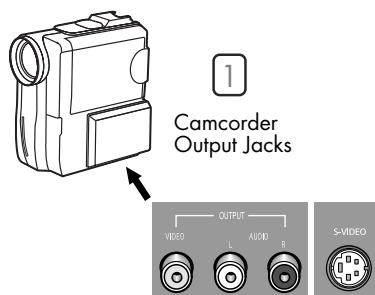
Connecting a Camcorder

The side panel jacks on your TV make it easy to connect a Camcorder to your TV. You can use your camcorder to view tapes without using a VCR.

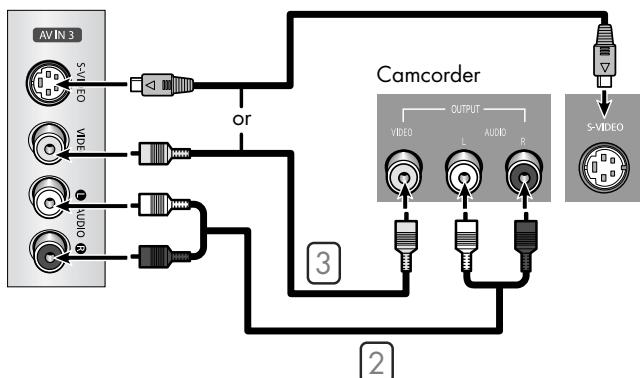
1 Locate the A/V output jacks on the camcorder. They are usually found on the side or back of the camcorder.

2 Connect a set of audio cables between the AUDIO IN jacks on the TV and the AUDIO output jacks on the camcorder. If you have a mono Camcorder, connect L(mono) to the Camcorder audio out using only one audio cable.

3 Connect a video cable between the VIDEO IN (or S-VIDEO IN) jack on the TV and the VIDEO (or S-VIDEO) output jack on the Camcorder. The audio-video cables shown here are usually included with a Camcorder. (If not, check your local electronics store.) If your Camcorder is stereo, you need to connect a set of two cables.



TV Rear and right side



NOTE

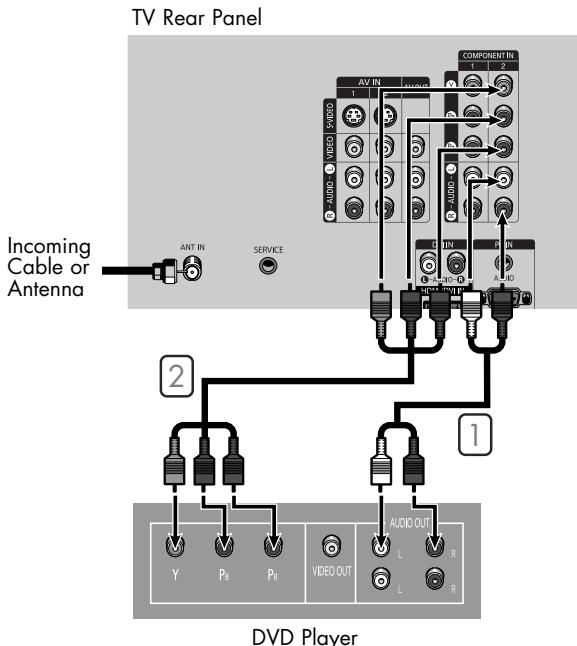
- Please be sure to match the color coded input terminals and cable jacks.

Connecting a DVD Player

The rear panel jacks on your TV make it easy to connect a DVD player to your TV.

Connecting to Y, Pb, Pr

- 1 Connect a set of audio cables between the COMPONENT (1 or 2) AUDIO (L, R) IN jacks on the TV and the AUDIO OUT jacks on the DVD player.
- 2 To enable Component video viewing, connect a set of video cables between the COMPONENT (1 or 2) VIDEO (Y, Pb, Pr) IN jacks on the TV and the COMPONENT (Y/Pb/Pr or Y/Cb/Cr) OUT jacks on the DVD player.



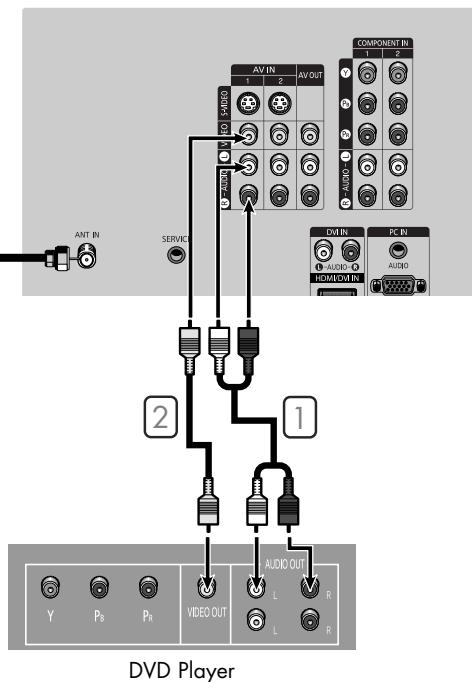
Connecting to Audio and Video Jacks

- 1 Connect a set of audio cables between the AUDIO IN (1 or 2) jacks on the TV and the AUDIO OUT jacks on the DVD player.
- 2 Connect a video cable between the VIDEO IN (1 or 2) jack on the TV and the VIDEO OUT jack on the DVD player.

NOTES

- Component Video separates the video into Y (Luminance (Brightness)), Pb (Blue) and Pr (Red) for enhanced video quality.
- Please be sure to match the color coded input terminals and cable jacks.

TV Rear Panel



Connections

Connecting a DTV Set-Top Box

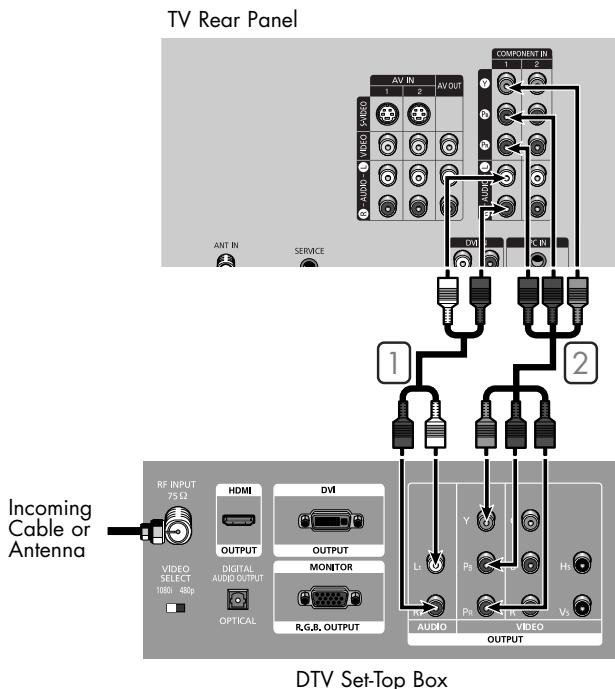
Connecting to Y, Pb, Pr

- 1 Connect a set of audio cables between the COMPONENT (1 or 2) AUDIO (L, R) IN jacks on the TV and the AUDIO OUT jacks on the Set-Top Box.

- 2 Connect a set of video cables between the COMPONENT (1 or 2) VIDEO (Y, Pb, Pr) IN jacks on the TV and VIDEO (Y/Pb/Pr or Y/Cb/Cr) OUT jacks on the Set-Top Box.

NOTE

- Please be sure to match the color coded input terminals and cable jacks.

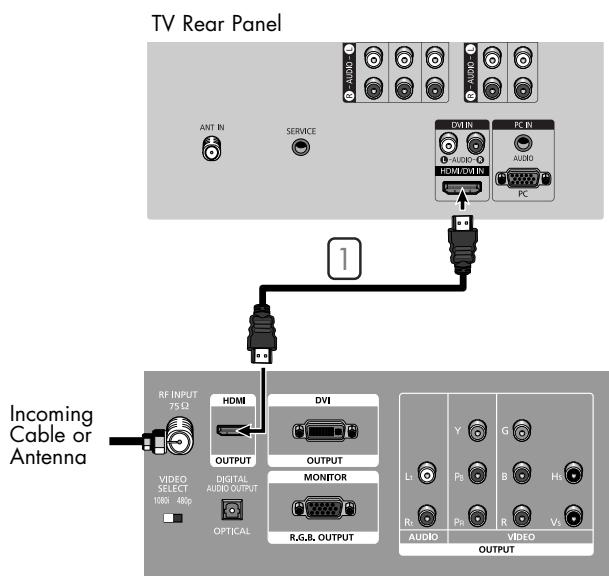


Connecting to HDMI (High Definition Multimedia Interface)

- 1 Connect an HDMI cable between the HDMI/DVI IN jack on the TV and the HDMI OUT jack on the Set-Top Box.

NOTE

- Make sure the HDMI/DVI source's power is on, or you will be unable to select it in the TV menu's source list.



Connecting to DVI (Digital Visual Interface)

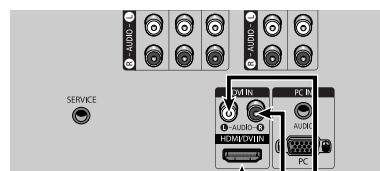
1 Connect a set of audio cables between the DVI AUDIO (L, R) IN jacks on the TV and the AUDIO OUT jacks on the Set-Top Box.

2 Connect an HDMI/DVI cable between the HDMI/DVI IN jack on the TV and the DVI OUT jack on the Set-Top Box.

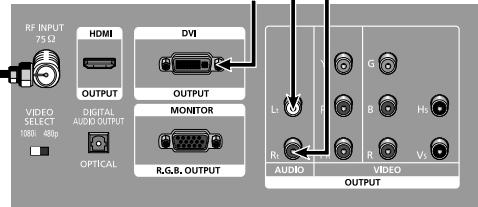
NOTES

- Make sure the DVI source's power is on, or you will be unable to select it in the TV menu's source list.
- The HDMI/DVI IN jack is not compatible with PC.
- Please be sure to match the color coded input terminals and cable jacks.

TV Rear Panel



Incoming
Cable or
Antenna



DTV Set-Top Box

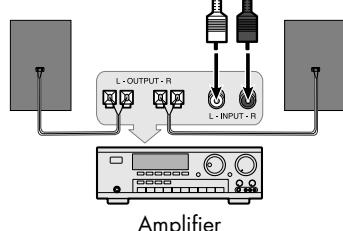
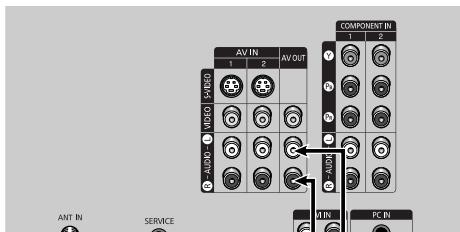
Connecting to an Analog Amplifier

1 The AV OUT (AUDIO L/R) jacks cannot be used for external speakers. You must hook them up to an amplifier.

NOTE

- When an audio amplifier is connected to the AV OUT (AUDIO L/R) jacks: Decrease the gain (volume) of the TV, and adjust the volume level with the volume control audio amplifier.
- If using the HDMI/DVI, PC, or Component input on the TV, the audio output signal is available only when the TV's Internal Mute is set to on. (Refer to page 76)

TV Rear Panel



Amplifier

ONWARD
AND
SWAY
SUNG
A
S
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W
A
SUNG



Operation

Operation

Turning the TV On and Off

Press the POWER button on the remote control.

You can also use the  (Power) button on the front panel.

Plug & Play Feature

When the TV is initially powered On, basic customer settings proceed automatically and subsequently: Setting the language, checking the antenna input, memorizing the channels, and setting the time.

NOTE

- The Plug & Play function operates after plugging in the TV for the first time.

1 If the television is in Standby mode, press the POWER button on the remote control. The message Start Plug & Play is displayed. Press the ENTER button to select OK. The Language menu is displayed.

- The Language menu will automatically appear after several seconds, even if the ENTER button is not pressed.



2 Press the ENTER button to enter the language. Press the  or  button to select language, then press the ENTER button.

- The message "Check antenna input" will automatically appear after several seconds, even if the ENTER button is not pressed.

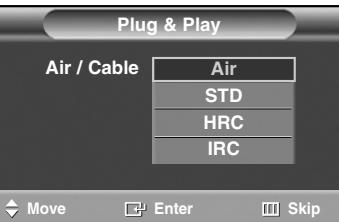


3 Press the ENTER button to select OK. The menu to select signal source is displayed.



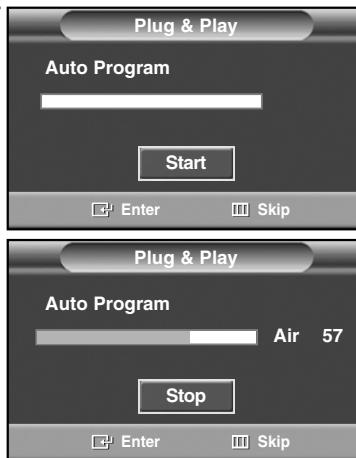
Continued...

4 Select the correct signal source (Air, STD, HRC and IRC) by pressing the ▲ or ▼ button, then press the ENTER button.



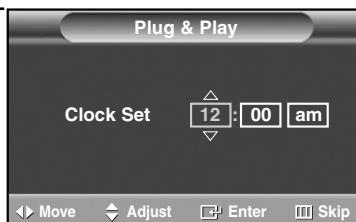
5 To start the channel search, press the ENTER button.

- The search will end automatically. Channels are sorted and stored in an order which reflects their position in the frequency range (with lowest first and highest last). When it has finished, the Clock Set menu is displayed.
- To stop the search before it has finished or return to normal viewing, press the MENU button.

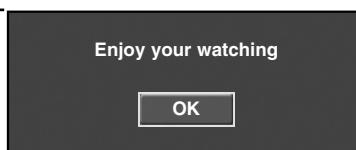


6 Press the ENTER button.
Press the ▲ or ▼ button to move to the hour, minute, or am/pm.
Set the Hour, Minute, or am/pm by pressing the ▲ or ▼ button.
Press the ENTER button.

- You can set the Hour and Minute directly by pressing the number buttons on the remote control.



7 When it has finished, the message "Enjoy your watching" is displayed, and the channels which have been stored can be viewed.



Continued...

Operation

To reset this feature

1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.



2 Press the ENTER button to select "Plug & Play".



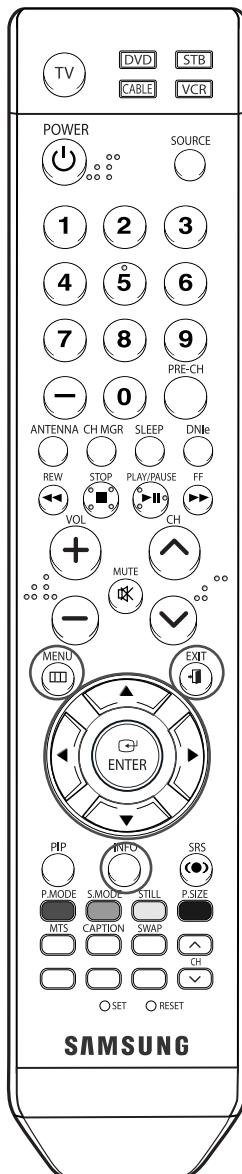
3 For further details on setting up options, refer to the previous page.

NOTE

- *Plug and Play can only be accessed in the TV mode.*

Viewing the Menus and On-Screen Displays

The on-screen menu system allows you to control the settings of your TV. Access the on-screen menu system by pressing the MENU button on the remote control. Once the on-screen menu appears, use the **▲/▼/◀/▶/ENTER** buttons on your remote control to select menu items and make adjustments. You can also view the on-screen menu system and make some adjustments using the TV's front (or right) side panel buttons.

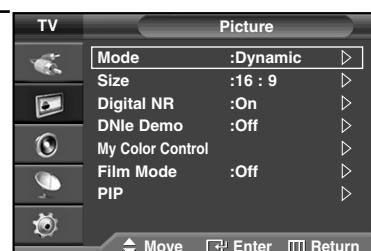


Viewing the Menus

1 Press the MENU button. The main menu is displayed. There are five menu groups: "Input", "Picture", "Sound", "Channel", and "Setup".



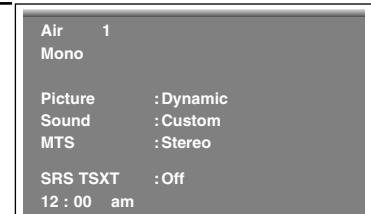
2 Press the **▲** or **▼** button to select an item you want in the menu. Press the **◀**, **▶** or ENTER button to display, change, or use the selected items. Use the ENTER button to enter items in the menu.



3 Press the EXIT button to exit.

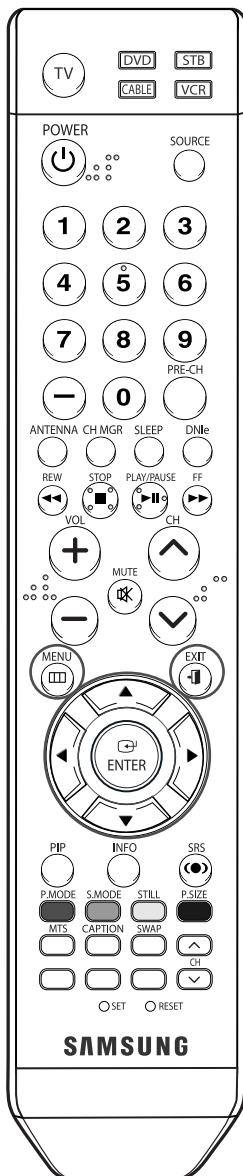
Viewing the Display

Press the INFO button on the remote control. The TV displays the current channel, the status of certain picture and sound settings and the current time. The information displayed varies according to the selected source.



Operation

Selecting a Menu Language



1 Press the MENU button.
Press the **▲** or **▼** button to select "Setup", then press the ENTER button.



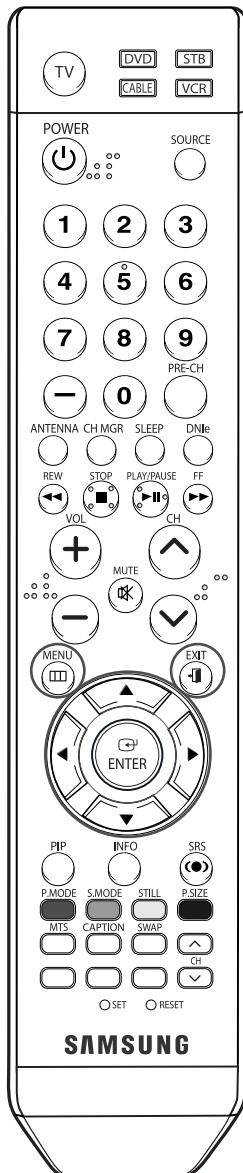
2 Press the **▲** or **▼** button to select "Language", then press the ENTER button.
Press the **▲** or **▼** button to select "English", "Español" or "Português", then press the ENTER button.



Press the EXIT button to exit.

Memorizing the Channels

Your TV can memorize and store all of the available channels for both "off-air" and cable channels. After the available channels are memorized, use the CH \wedge and CH \vee buttons to scan through the channels. This eliminates the need to change channels by entering the channel digits. There are three steps for memorizing channels: selecting a broadcast source, memorizing the channels (automatic) and adding and deleting channels (manual).



Selecting the Video Signal Source

Before your television can begin memorizing the available channels, you must specify the type of signal source that is connected to the TV (i.e., an air or cable system).

1 Press the MENU button.
Press the Δ or ∇ button to select "Channel", then press the ENTER button.



2 Press the ENTER button to select "Air / Cable"



3 Press the Δ or ∇ button to select "Air", "STD", "HRC" or "IRC", then press the ENTER button.

- If you are using an Air antenna, leave "Air" displayed.
If you are using a cable antenna, press the Δ or ∇ button to display the type of cable system: "STD", "HRC" or "IRC".
(If you are not sure which type of cable system you have, contact your cable company).

Press the EXIT button to exit.

NOTE

- STD, HRC and IRC identify various types of cable TV systems. Contact your local cable company to identify the type of cable system that exists in your particular area. At this point the signal source has been selected. Proceed to "Storing Channels in Memory" (Next page).

Operation

Storing Channels in Memory

1 First, select the correct signal source (Air, STD, HRC and IRC). See steps on previous page.
Press the MENU button. Press the ▲ or ▼ button to select "Channel", then press the ENTER button.



2 Press the ▲ or ▼ button to select "Auto Program", then press the ENTER button.



3 Press the ENTER button.
The TV will begin memorizing all of the available channels.
After all the available channels are stored, the Auto program menu reappears.
Press the ENTER button to stop.



Press the EXIT button to exit.

NOTES

- All available analog channels are automatically stored in memory.
- It takes approximately 3 to 10 minutes to memorize channels.

Changing Channels

Using the Channel Buttons

Press the CH \wedge or CH \vee button to change channels.

When you press the CH \wedge or CH \vee button, the TV changes channels in sequence. You will see all the channels that the TV has memorized.

(The TV must have memorized at least three channels.)

You will not see channels that were either erased or not memorized.

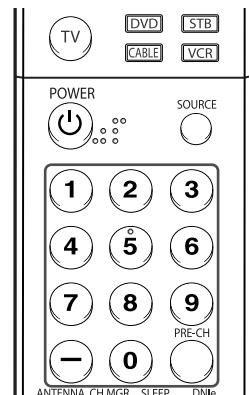
Using the Number Buttons

Use the number buttons to quickly switch to any channel.

Press the number buttons to go directly to a channel. For example, to select channel 27, press "2," then "7." The TV will change channels when you press the second number.

Using the “-” Button

When you use the number buttons, you can directly select channels that were either erased or not memorized. To select a channel over 100, press the “-” button. (For channel “112”, press the “-” button, then “1”, then “2”. To change to single-digit channels (0~9) faster, press “0” before the single digit. (For channel “4” press “0”, then “4”).



Using the Previous Channel

Press the PRE-CH button.

The TV changes to the last channel you were watching.

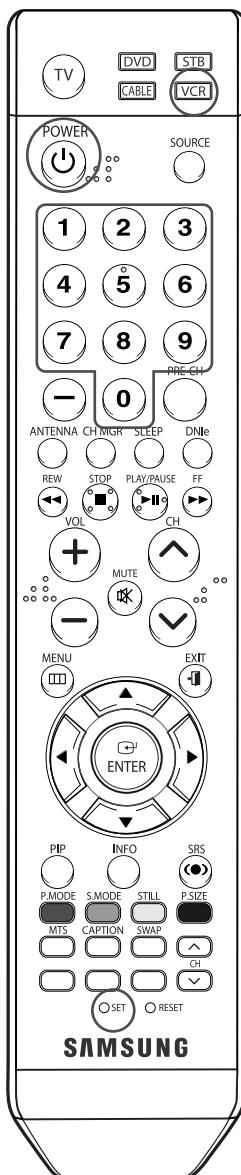
Operation

Customizing Your Remote Control

After it has been set up properly, your remote control can operate in five different modes: TV, VCR, Cable, DVD, or Set-Top Box. Pressing the corresponding button on the remote control allows you to switch between these modes, and control whichever piece of equipment you choose.

NOTE

- The remote control might not be compatible with all DVD Players, VCRs, Cable boxes, and Set-Top Boxes.

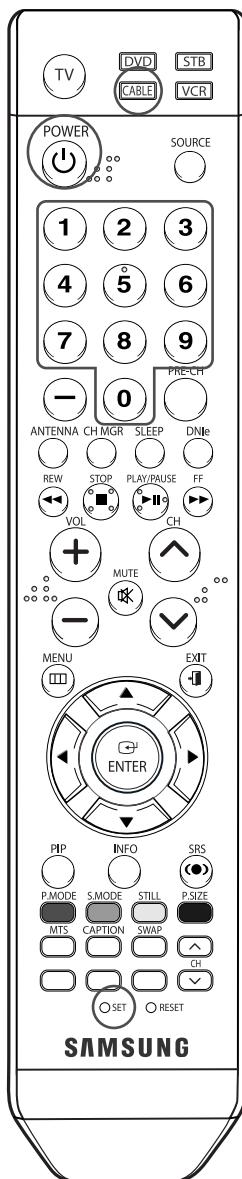


Setting Up the Remote to Operate Your VCR

- 1 Turn off your VCR.
- 2 Press the VCR button on your TV's remote control.
- 3 Press the SET button on your TV's remote control.
- 4 Using the number buttons on your remote control, enter three digits of the VCR code listed on page 38 of this manual for your brand of VCR. Make sure you enter three digits of the code, even if the first digit is a "0". (If more than one code is listed, try the first one.)
- 5 Press the POWER button on the remote control. Your VCR should turn on if your remote is set up correctly.

If your VCR does not turn on after set-up, repeat steps 2, 3 and 4, but try one of the other codes listed for your brand of VCR. If no other codes are listed, try each VCR code, 000 through 080.

Note on Using Remote Control Modes: VCR
When your remote control is in "VCR" mode, the volume buttons still control your TV's volume.



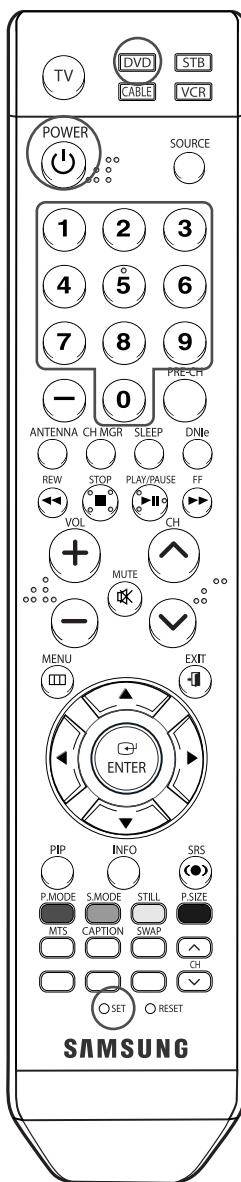
Setting Up the Remote to Operate Your Cable Box

- 1 Turn off your cable box.
- 2 Press the CABLE button on your TV's remote control.
- 3 Press the SET button on your TV's remote control.
- 4 Using the number buttons on your remote control, enter three digits of the cable box code listed on page 39 of this manual for your brand of cable box. Make sure you enter three digits of the code, even if the first digit is a "0".
(If more than one code is listed, try the first one.)
- 5 Press the POWER button on the remote control.
Your cable box should turn on if your remote is set up correctly.

If your cable box does not turn on after set-up, repeat steps 2, 3 and 4, but try one of the other codes listed for your brand of cable box. If no other codes are listed, try each code, 000 through 046.

Note on Using Remote Control Modes: Cable Box
When your remote control is in "CABLE" mode, the volume buttons still control your TV's volume.

Operation



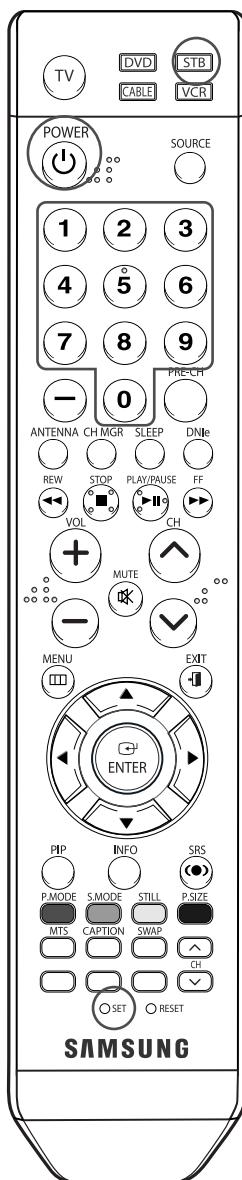
Setting Up the Remote to Operate Your DVD

- 1 Turn off your DVD.
- 2 Press the DVD button on your TV's remote control.
- 3 Press the SET button on your TV's remote control.
- 4 Using the number buttons on your remote control, enter three digits of the DVD code listed on page 40 of this manual for your brand of DVD. Make sure you enter three digits of the code, even if the first digit is a "0". (If more than one code is listed, try the first one.)
- 5 Press the POWER button on the remote control.
Your DVD should turn on if your remote is set up correctly.

If your DVD does not turn on after set-up, repeat steps 2, 3 and 4, but try one of the other codes listed for your brand of DVD. If no other codes are listed, try each code, 000 through 141.

Note on Using Remote Control Modes: DVD

When your remote control is in "DVD" mode, the volume buttons still control your TV's volume.



Setting Up the Remote to Operate Your Set Top Box

- 1 Turn off your STB.
- 2 Press the STB button on your TV's remote control.
- 3 Press the SET button on your TV's remote control.
- 4 Using the number buttons on your remote control, enter three digits of the STB code listed on page 39 of this manual for your brand of STB. Make sure you enter three digits of the code, even if the first digit is a "0". (If more than one code is listed, try the first one.)
- 5 Press the POWER button on the remote control.
Your STB should turn on if your remote is set up correctly.

If your STB does not turn on after set-up, repeat steps 2, 3 and 4, but try one of the other codes listed for your brand of STB.
If no other codes are listed, try each code, 000 through 074.

Note on Using Remote Control Modes: STB

When your remote control is in "STB" mode, the volume buttons still control your TV's volume

Operation

Remote Control Codes

VCR

Brand	Code
SAMSUNG	000 001 002 003 004 005 077 078 079
ADMIRAL	020
AIWA	025
AKAI	004 027 032
AUDIO DYNAMICS	007 026
BELL&HOWELL	018
BROKSONIC	022
CANDLE	002 003 006 008 015 055
CANON	021 056
CITIZEN	002 003 006 008 015 055
COLORTYME	007
CRAIG	002 024
CURTIS MATHES	002 007 008 017 021 025 056 064 066
DAEWOO	003 010 011 012 013 014 015 016
DB	007 026
DIMENSIA	017
DYNATECH	025
ELECTROHOME	034
EMERSON	001 003 006 021 022 025 030 032 034 040 047 050 052 060 063 065 066 067 069 073
FISHER	018 024 028 029 048 051 061
FUNAI	025
GENERAL ELECTRIC	002 005 017 021 056
GO VIDEO	002
LG(Goldstar)	006 007 008 009 010
HARMAN KARDON	007
HITACHI	019 025 041 042 074
INSTANT REPLAY	021
JC PENNEY	002 007 018 019 021 026 037 041 054 056
JCL	007 008 018 021 026 037
KENWOOD	007 008 018 026 037
KLH	070
LIOYD	025
LOGIK	038
LXI	025
JVC	081 082 083
MAGNAVOX	021 056 059
MARANTZ	007 008 018 021 026 037 062
MARTA	006
KONIA	036
ORION	073 074 075 076
MEI	021
MEMOREX	006 021 024 025
MGA	034
MIDLAND	005
MINOLTA	019 041 075

Brand	Code
MITSUBISHI	019 034 041 046
MONTGOMERY WARD	020
MTC	002 025
MULTITECH	002 005 025 038
NEC	007 008 018 026 037 062 064
OPTIMUS	020
PANASONIC	021 056 071 072
PENTAX	019 041 075
PENTEX RESEARCH+	008
PHILCO	021 056 059
PHILIPS	021 080
PIONEER	019 026 039 053
PORTLAND	015 049 055
PROSCAN	017
QUARTZ	018
QUASAR	021 056
RADIO SHACK/REALISTIC	006 018 020 021 024 025 029 034 048 056
RCA	002 017 019 021 035 041 043 057 068 076
SANSUI	026
SANYO	018 024
SCOTT	003 047 052 067
SEARS	006 018 019 024 028 029 041 048 051
SHARP	020 034 045 015
SHIMTOM	027 033 038 058
SIGNATURE	025
SONY	027 033 044
SYLVANIA	021 025 056 059
SYMPHONIC	025
TANDY	018 025
TASHIKA	006
TATUNG	037
TEAC	025 037 068
TECHNICS	021
TEKNIKA	006 021 025 031
TMK	066
TOSHIBA	003 019 029 051 052
TOTEVISION	002 006
UNITECH	002
VECTOR RESEARCH	007 026
VICTOR	026
VIDEO CONCEPTS	007 026
VIDEOSONIC	002
WARDS	002 003 006 019 020 021 024 025 034 038 041
YAMAHA	007 008 018 026 037
ZENITH	023 027 033

continued...

Remote Control Codes

CABLE BOX

Brand	Code
SAMSUNG	000 001 002 003 004 005 006 007
GI	041
HAMLIN	003 024 031
HITACHI	025 030
JERROLD	038 039
MACOM	025 030
MAGNAVOX	019 023 028
OAK	026
PANASONIC	003 022 027 037 044
PHILIPS	019 021 023 028
PIONEER	004 018 020 044
RCA	014 022 040
REGAL	003

Brand	Code
REGENCY	015 023
SA	042 043
SCIENTIFIC ATLAN	042 043
SPRUCER	022
STARGATE 2000	036
SYLVANIA	016
TEXSCAN	016
TOCOM	032
UNIVERSAL	033 034
VIEWSTAR	019 021 023 028
WAMER AMEX	046
ZENITH	017 029 035 037 045

SAMSUNG SET-TOP BOX

Product	Code
Ground wave STB	001 002
Satellite STB	003
CABLE STB	004
STB DVD COMBO	008
Satellite STB HDD COMBO Standard	009

Product	Code
Satellite STB HDD COMBO Premium	010
CABLE STB HDD COMBO Standard	011
CABLE STB HDD COMBO Premium	012
Ground wave STB HDD COMBO Standard	013
Ground wave STB HDD COMBO Premium	014

SET-TOP BOX

Brand	Code
ALPHASTAR	023
ANAM	043
CHANNEL MASTER	018 034
CROSSDIGITAL	019
CHAPARRAL	035
DIRECT TV	015 016 017 019 022 045 060 061 062 065 066 067 068
DAEWOO	074
DISH NETWORK SYSTEM	069 070
DISHPRO	069
DRAKE	018 024 032
DX ANTENNA	027
ECHOSTAR	025 069 070 071
EXPRESSVU	069
GOI	069
GE	065
GENERAL INSTRUMENT	046 047 048 063 064
HTS	069
HOME CABLE	056
HITACHI	022
HUGHES NETWORK	015 017
IQ	020
IQ PRISM	020
JANEIL	059
JERROLD	063
JVC	069 070

Brand	Code
LG(Goldstar)	044 073
MAGNAVOX	016 021 036 038 039 040 041 042
MEMOREX	016
MOTOROLA	064
MACOM	018
MITSUBISHI	015
NEXT LEVEL	047 048 064
PHILIPS	015 016 017 021 033 036 038 039 040 041 042 067
PRIMESTAR	046 049 050 063
PANASONIC	058 059 061 062
PAYSAT	016
PROSCAN	065 066
RCA	051 052 053 065 066
RADIOSHACK	064
REALISTIC	057
STS	020 027
STAR TRAK	026
SKY	031
SKY LIFE	005 006 007
SHACK	064
STAR CHOICE	064
SONY	054 060
TOSHIBA	015 017 028 029 030 072
ULTIMATE TV	060 066
UNIDEN	016 021 037 055 056 057
ZENITH	024 031 068

continued...

Operation

Remote Control Codes

SAMSUNG DVD

Product	Code
DVD	000 001 002
DVDR	003 004
BD Record	005 006
VCR COMBO	007 008 009 010 011
VCR Record	012
DHR COMBO	013

Product	Code
Home Theater VCR COMBO	014 015 016
HDD Record COMBO	017
TWIN TRAY COMBO	018
STB DVD COMBO	019
DVD Receiver	020
AV Receiver	021

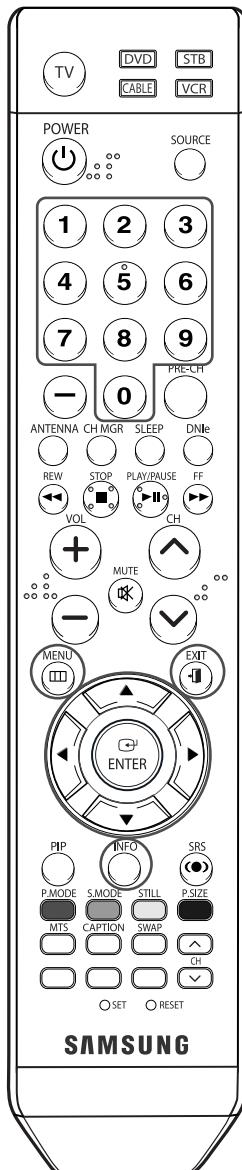
DVD

Brand	Code
ANAM	030
AUDIOVOX	075
AUDIOLOGIC	085
ANABA	072
APEX DIGITAL	070 071 074 086 083 084 088 111 112
AIWA	114
BROKSONIC	062
BLAUPUNKT	074
B&K	122 123
CURTIS MATHES	027
CYBER HOME	065 077 078 079 082
CLARION	080 125
CIRRUS	081
CINEVISION	095
DAEWOO	066
DENON	146
FARENHEIT	067 068
FISHER	090
GPX	060
GO VIDEO	061 089 133 135
GE	069 074
GREENHILL	074
HITACHI	064 113
HITEKER	071
HOYO	073
HARMAN / KARDON	091 110
IRT	089
INTEGRA	092
JBL	091
JVC	022 033 115 116
JATON	073
KENWOOD	051 108 109
KISS	073
KONKA	059 100 106 107
KLH	074 075
LG(Goldstar)	025 031
LOEWE	057
LASONIC	058
MOBILE AUTHORITY	054
MEMOREX	055
MALATA	056
MAGNAVOX	076 093
MINTEK	074 094
MONYKA	073

Brand	Code
NORCENT	048 049 050
NEXT BASE	052
NEC	053
NANTAUUS	144
NESA	074
OPTOMEDIA ELECTRONICS	105
OPTIVIEW	072
ONKYO	076 092 119
PHILCO	044 045
PRINCETON	046 047
PROSCAN	023
PANASONIC	024 034 124 134 136 137 138
PHILIPS	036 076
ROTEL	117 118
RIO	120
RCA	023 035 074 075 131 132
RAITE	073
ROWA	038
SAMPO	104
SONY	026 029 126 127 128 129 130 141
SHERWOOD	039 041
SVA	042
SYLVANIA	043 093
SHARP	140
SANSUI	062
SANYO	062
SHINSONIC	094
SANYO	090
THOMSON	145
TOSHIBA	028 062 076
TECHNICS	139
TVIEW	072
TOKAI	073
TEAC	096
TECHWOOD	097
TREDEX	098 099 101
URBAN CONCEPTS	076
VENTURER	075
VOCOPRO	102
YAMAHA	032 063
YAMAKAWA	040 073
XWAVE	103
ZENITH	076 121

Setting the Clock

Setting the clock is necessary in order to use the various timer features of the TV. Also, you can check the time while watching the TV. (Just press the INFO button.)



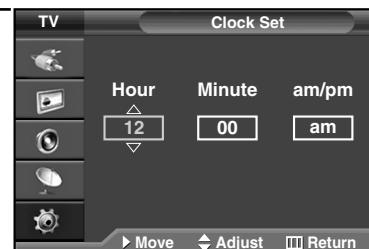
1 Press the MENU button.
Press the **▲** or **▼** button to select "Setup", then press the ENTER button.



2 Press the **▲** or **▼** button to select "Time", then press the ENTER button.



3 Press the ENTER button to select "Clock Set".



4 Press the **◀** or **▶** button to move to "Hour", "Minute", or "am/pm". Set the clock you want by pressing the **▲** or **▼** button, then press the ENTER button.

- You can set the hour and minute directly by pressing the number buttons on the remote control.

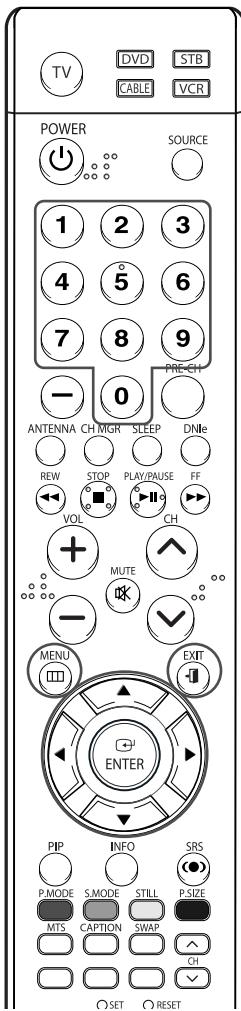
Press the EXIT button to exit.

NOTE

- The current time will appear every time you press the INFO button.

Operation

Setting the On/Off Timer



1 Press the MENU button. Press the **▲** or **▼** button to select "Setup", then press the ENTER button.



2 Press the **▲** or **▼** button to select "Time", then press the ENTER button.

Press the **▲** or **▼** button to select "On Timer", then press the ENTER button.

Press the **▲** or **▼** button to adjust "Hour", then press the **▶** button to move to the next step.

Set other items using the same method as above.

To activate On Timer with the setting entered, set Activation to "Yes" by pressing **▲** or **▼** button.

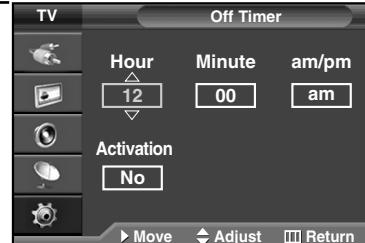
- You can set the hour and minute directly by pressing the number buttons on the remote control.

When finished, press the MENU button to return.



3 Press the **▲** or **▼** button to select "Off Timer", then press the ENTER button.

Press the **▲** or **▼** button to adjust "Hour", then press the **▶** button to move to the next step. Set other items using the same method as above.



To activate Off Timer with the setting entered, set Activation to "Yes" by pressing **▲** or **▼** button.

When finished, press the EXIT button to exit.

- You can set the hour and minute directly by pressing the number buttons on the remote control.

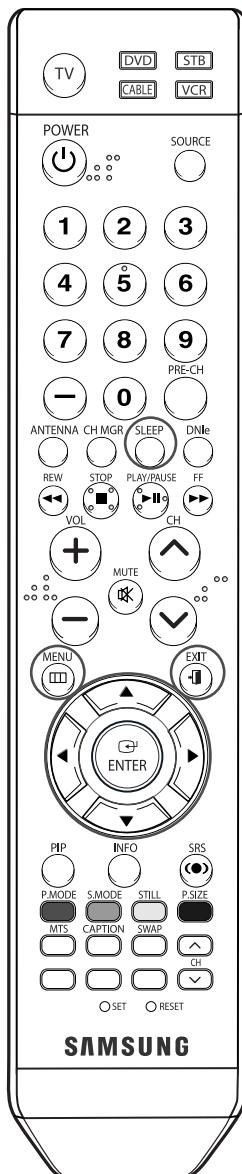
NOTE

• Auto Power Off

When you set the timer "On", the television will eventually turn off, if no controls are operated for 3 hours after the TV was turned on by the timer. This function is only available in timer "On" mode and prevents overheating, which may occur if a TV is on for too long.

Setting the Sleep Timer

The sleep timer automatically shuts off the TV after a preset time (from Off to 180 minutes).



1 Press the MENU button.
Press the **▲** or **▼** button to select "Setup", then press the ENTER button.



2 Press the **▲** or **▼** button to select "Time", then press the ENTER button.

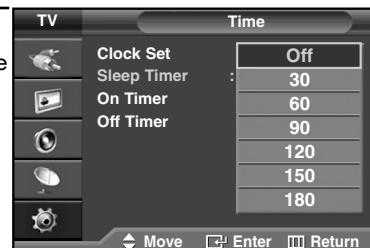


3 Press the **▲** or **▼** button to select "Sleep Timer", then press the ENTER button.



4 Press the **▲** or **▼** button to select the time interval for the TV to stay on, then press the ENTER button.
The interval ranges from Off to 180 minutes.

Press the EXIT button to exit.



Alternate method

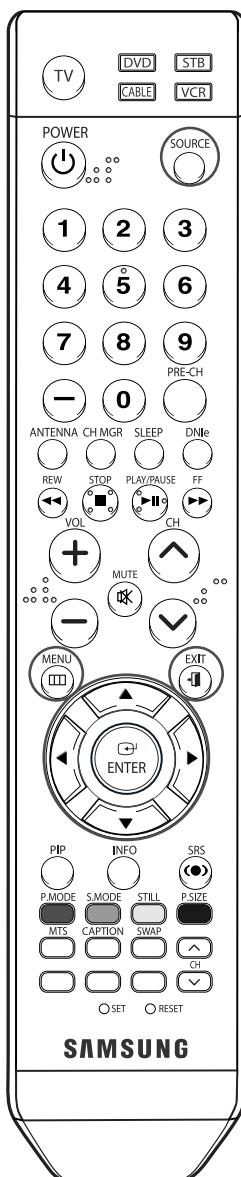
Press the SLEEP button on the remote control repeatedly until the appropriate time interval appears (any of the preset values from "Off" to "180 min").

Sleep Timer : 90 min

Operation

Viewing an External Signal Source

Use the remote control to switch between viewing signals from connected equipment, such as a VCR, DVD, Set-Top Box or the TV source (broadcast or cable).



Setting the Signal Source

1 Press the MENU button.
Press the ENTER button to select "Input".



2 Press the ENTER button to select "Source List".
Press the Δ or ∇ button to select a signal source, then press the ENTER button.

- When you connect equipment to the TV, you can choose between the following sets of jacks: "AV1", "AV2", "S-VIDEO1", "S-VIDEO2", "COMPONENT1", "COMPONENT2", "PC", or "HDMI" on the TV's rear panel and "AV3" or "S-VIDEO3" on the TV's side panel.



Alternate method

Press the SOURCE button on the remote control repeatedly to select an external signal source.

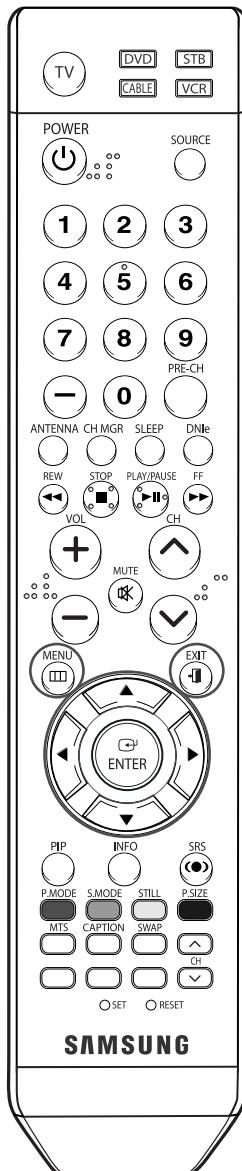


NOTES

- Only connected devices can be selected.
- Before selecting an input source, connect an external device first.
- HDMI input can be selected only when the external device is turned on and connected to the TV.

Assigning Names to External Input Mode

This feature enables you to name the input source you have connected.



1 Press the MENU button.
Press the ENTER button to select "Input".



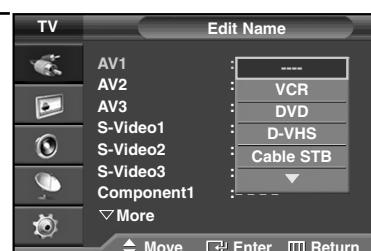
2 Press the ▲ or ▼ button to select "Edit Name", then press the ENTER button.



3 Press the ▲ or ▼ button to select a signal source to be edited, then press the ENTER button.



4 Press the ▲ or ▼ button to select the external device : VCR, DVD, D-VHS, Cable STB, HD STB, Satellite STB, AV Receiver, DVD Receiver, Game, Camcorder, DVD Combo, DHR (DVD HDD Recorder), PC.



Press the ENTER button.
Set other signal sources (AV2, AV3, S-Video1, S-Video2, S-Video3, Component1, Component2, PC, HDMI) using the same method as listed above.

Press the EXIT button to exit.

GOALS
SWING
SUNG
AWAY
SUNG
SWING
AWAY
SUNG



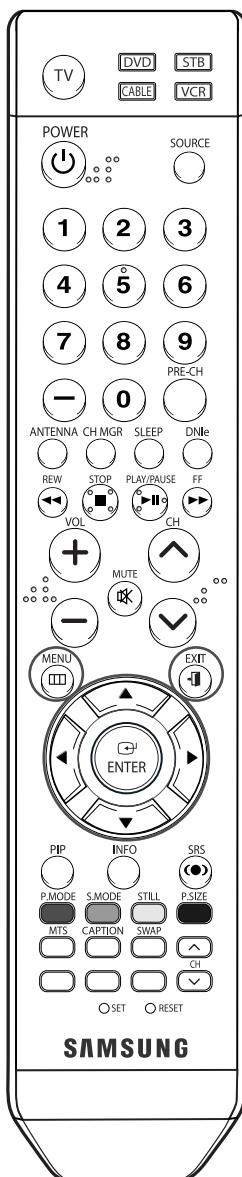
Channel Control

Channel Control

Adding / Locking Channels

Using the Channel Manager, you can conveniently lock or add channels.

Preset : To use the Channel Manager function, first run Auto Program (see page 32).



Adding channels

1 Press the MENU button.
Press the ▲ or ▼ button to select "Channel", then press the ENTER button.



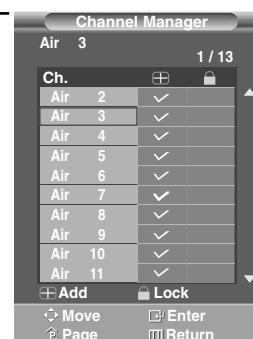
2 Press the ▲ or ▼ button to select "Channel Manager", then press the ENTER button.



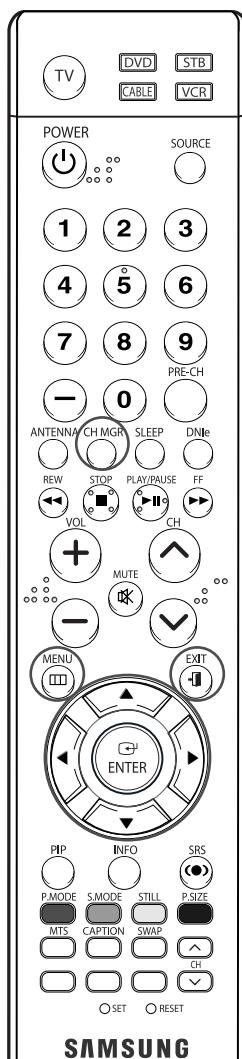
3 Press the ENTER button to select "Channel Manager".

Move to the (⊕) field by pressing the ▲/▼/◀/▶ buttons, select a channel to be added, and press the ENTER button to add the channel.

- If you press the ENTER button again, the (✓) symbol next to the channel disappears and the channel is not added.



Press the EXIT button to exit.



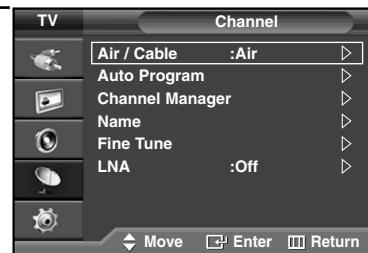
Alternate method

Press the CH MGR button on the remote control to display a list of channels.



Locking channels

1 Press the MENU button.
Press the **▲** or **▼** button to select "Channel", then press the ENTER button.



2 Press the **▲** or **▼** button to select "Channel Manager", then press the ENTER button.



3 Press the **▲** or **▼** button to select "Child Lock", then press the ENTER button.

Press the **▲** or **▼** button to select "On", then press the ENTER button.

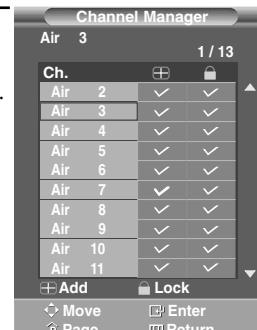


4 Press the **▲** or **▼** button to select "Channel Manager", then press the ENTER button.

Move to the (**✉**) field by pressing the **▲/▼/◀/▶** buttons, select a channel to be locked, and press the ENTER button.

- If you press the ENTER button again, the (**✓**) symbol next to the channel disappears and the channel is not locked.
- A blue screen is displayed when Child Lock is activated.

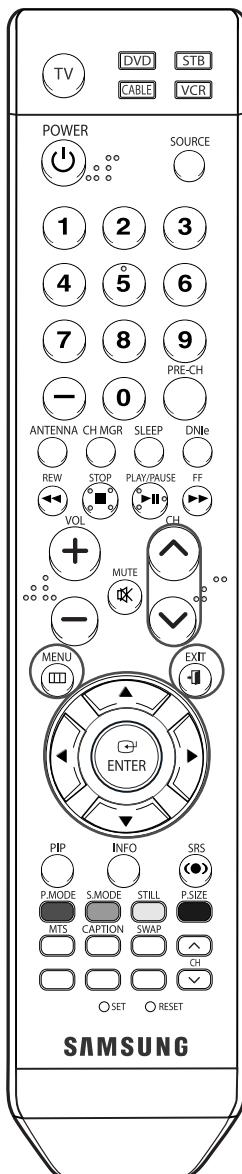
Press the EXIT button to exit.



Channel Control

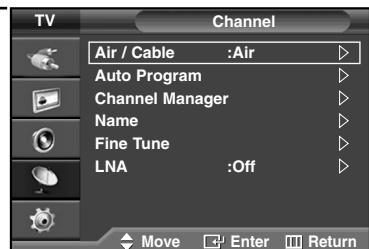
Labeling the Channels

Use this feature to assign an easy-to-remember label to analog channels (i.e., "CBS", "ESPN", "PBS2", CNN02", etc.) A label consists of five fields, where each field is a letter, a number or a blank. When the INFO button is pressed, the channel label will appear below the channel number.



1 Press the CH \wedge or CH \vee button to tune to the channel that will be labeled.

2 Press the MENU button.
Press the \blacktriangle or \blacktriangledown button to select "Channel", then press the ENTER button.
Press the \blacktriangle or \blacktriangledown button to select "Name", then press the ENTER button.



3 Press the \blacktriangle or \blacktriangledown button to select the channel to be assigned to a new name. Press the ENTER button.



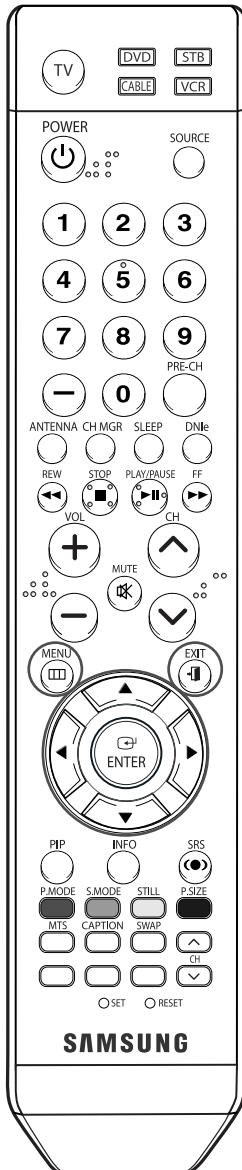
4 Press the \blacktriangle or \blacktriangledown button to select a letter (A~Z), a number (0~9), or a symbol. Move on to the previous or next letter by pressing the \blacktriangleleft or \blacktriangleright button.



Press the EXIT button to exit.

Fine Tuning Analog Channels

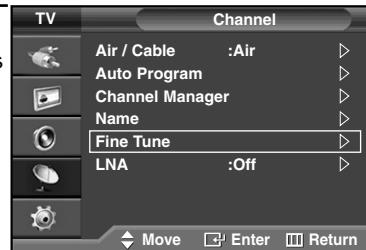
Use fine tuning to manually adjust a particular channel for optimal reception.



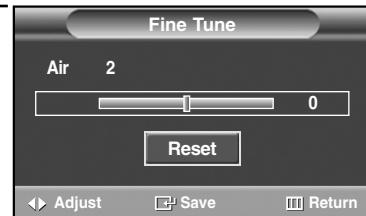
1 Press the MENU button. Press the **▲** or **▼** button to select "Channel", then press the ENTER button.



2 Press the **▲** or **▼** button to select "Fine Tune", then press the ENTER button.

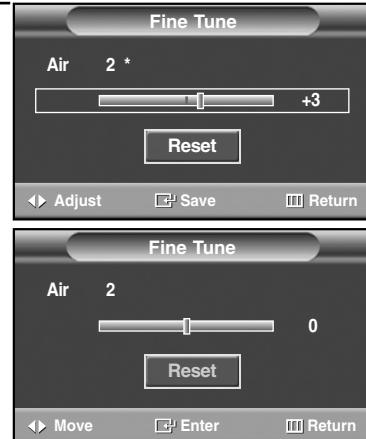


3 Press the **◀** or **▶** button to adjust the fine tuning.



4 To store the fine tuning setting in the TV's memory, press the ENTER button. To reset the fine tuning setting, press the **▼** button to select "Reset", then press the ENTER button.

Press the EXIT button to exit.



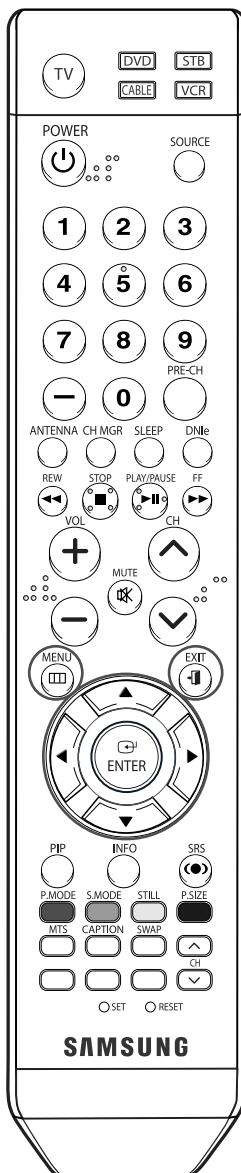
NOTES

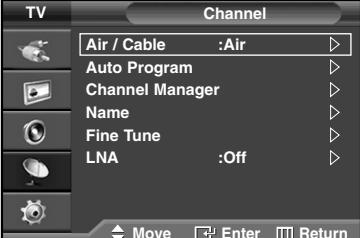
- Only analog TV channels can be fine tuned.
- ** will appear next to the name of fine-tuned channels.

Channel Control

LNA (Low Noise Amplifier)

If the TV is operating in a weak-signal area, sometimes the LNA function can improve the reception (a low-noise preamplifier boosts the incoming signal).



- 1 Press the MENU button. Press the **▲** or **▼** button to select "Channel", then press the ENTER button.
A screenshot of the TV's on-screen menu. The 'Channel' option is highlighted with a yellow box. The menu includes: Air / Cable :Air, Auto Program, Channel Manager, Name, Fine Tune, and LNA :Off. At the bottom are 'Move', 'Enter', and 'Return' buttons.

TV	Channel
Air / Cable	:Air
Auto Program	
Channel Manager	
Name	
Fine Tune	
LNA	:Off
- 2 Press the **▲** or **▼** button to select "LNA", then press the ENTER button.
A screenshot of the TV's on-screen menu. The 'LNA' option is highlighted with a yellow box. The menu includes: Air / Cable :Air, Auto Program, Channel Manager, Name, Fine Tune, and LNA :Off. At the bottom are 'Move', 'Enter', and 'Return' buttons.

TV	Channel
Air / Cable	:Air
Auto Program	
Channel Manager	
Name	
Fine Tune	
LNA	:Off
- 3 Press the **▲** or **▼** button to select "Off" or "On", then press the ENTER button.
Press the EXIT button to exit.
A screenshot of the TV's on-screen menu. The 'LNA' option is highlighted with a yellow box. The menu includes: Air / Cable :Air, Auto Program, Channel Manager, Name, Fine Tune, and LNA :On. At the bottom are 'Move', 'Enter', and 'Return' buttons.

TV	Channel
Air / Cable	:Air
Auto Program	
Channel Manager	
Name	
Fine Tune	
LNA	:On

NOTES

- If the picture is noisy with the LNA set to On, select Off.
- The LNA setting needs to be set individually for each channel.

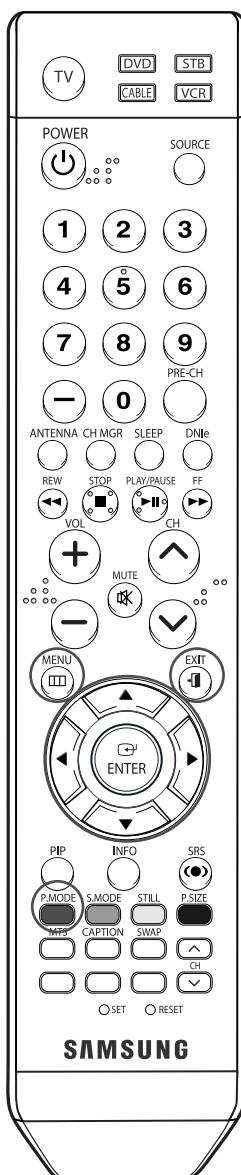


Picture Control

Picture Control

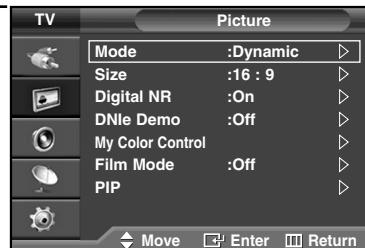
Picture Control

You can select the type of picture which best corresponds to your viewing requirements.

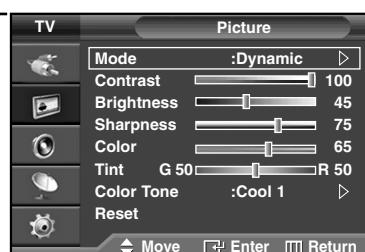


Changing the Picture Standard

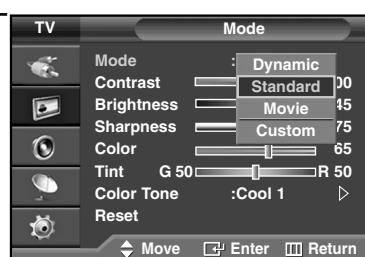
1 Press the MENU button.
Press the **▲** or **▼** button to select "Picture", then press the ENTER button.



2 Press the ENTER button again to select "Mode".

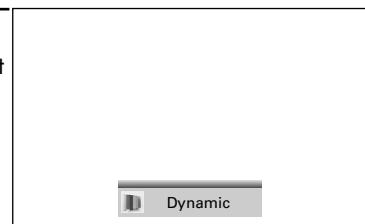


3 Press the ENTER button.
Press the **▲** or **▼** button to select the desired picture mode (Dynamic, Standard, Movie, or Custom), then press the ENTER button.
Press the EXIT button to exit.



Alternate method

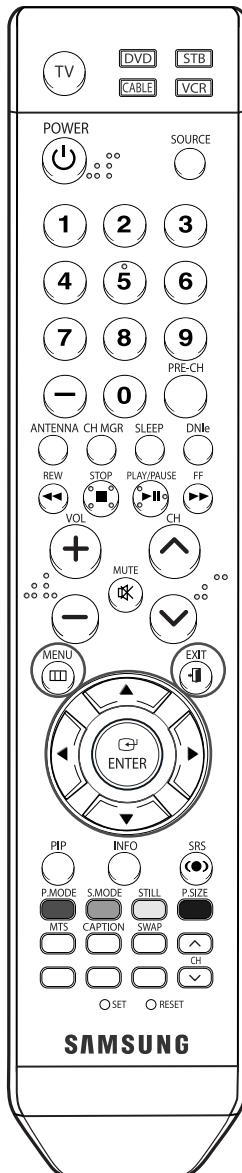
Press the P.MODE button on the remote control repeatedly to select the desired picture mode.



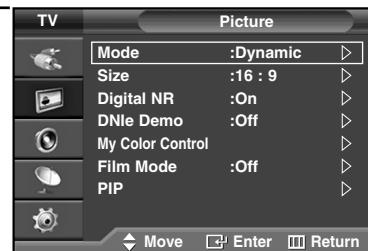
- Choose "Dynamic" for viewing the TV during the day or when there is a bright light in the room.
- Choose "Standard" for general TV watching mode.
- Choose "Movie" when viewing a movie.
- Choose "Custom" if you want to adjust the settings according to personal preference (see "Customizing the Picture Settings", page 55).

Customizing the Picture Settings

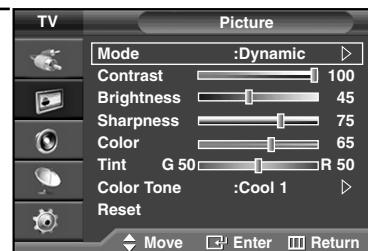
You can use the on-screen menus to change the "Contrast", "Brightness", "Sharpness", "Color", "Tint", and "Color Tone" according to personal preference.



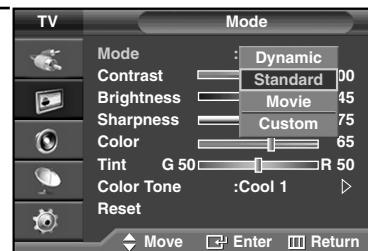
1 Press the MENU button. Press the **▲** or **▼** button to select "Picture", then press the ENTER button.



2 Press the ENTER button to select "Mode".



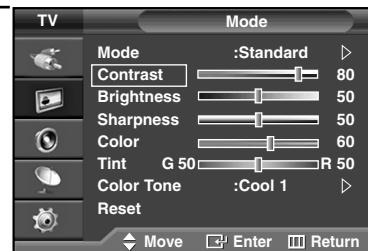
3 Press the ENTER button. Press the **▲** or **▼** button to select the desired picture mode (Dynamic, Standard, Movie, or Custom), then press the ENTER button.



4 Press the **▲** or **▼** button to select a particular option (Contrast, Brightness, Sharpness, Color, or Tint), then press the ENTER button.

Press the **◀** or **▶** button to decrease or increase the value of a particular item.

- You can also select these options (Contrast, Brightness, Sharpness, Color, or Tint) by pressing the **▲** or **▼** button.



NOTES

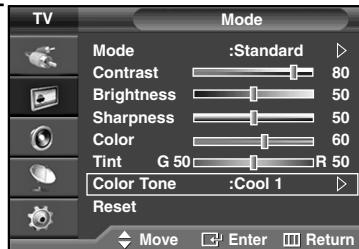
- "Tint" doesn't operate in HDMI, PC or any Component mode.
- In PC mode, the Contrast and Brightness can be selected.

Continued...

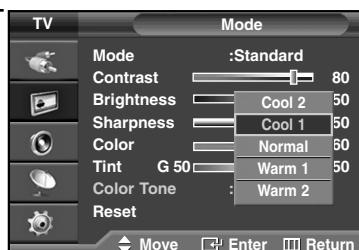
Picture Control

5 Press the ENTER button to return to "Mode".

Press the **▲** or **▼** button to select "Color Tone", then press the ENTER button.



6 Press the **▲** or **▼** button to select a particular option (Cool2, Cool1, Normal, Warm1, or Warm2), then press the ENTER button.

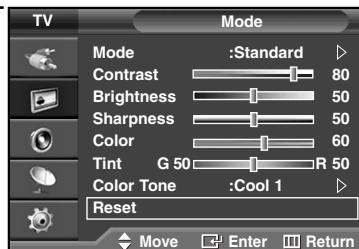


Resetting the Picture Settings to the Factory Defaults

7 To return the factory defaults, select "Reset" by pressing the **▲** or **▼** button. Press the ENTER button.

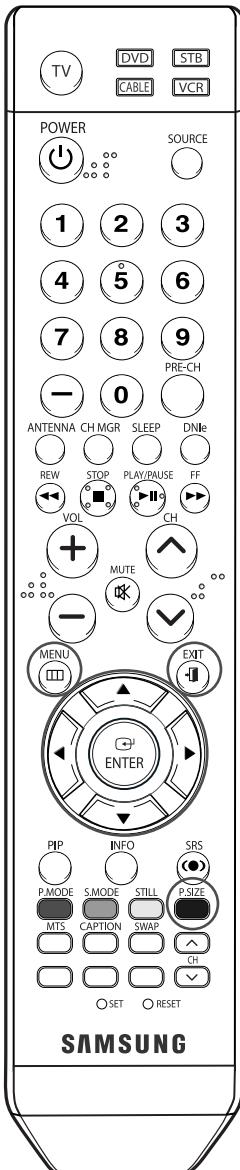
- The previously adjusted settings will be reset to the factory defaults.

Press the EXIT button to exit.

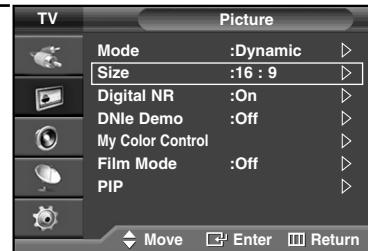


Changing the Picture Size

You can select the picture size which best corresponds to your viewing requirements.



1 Press the MENU button.
Press the **▲** or **▼** button to select "Picture", then press the ENTER button.
Press the **▲** or **▼** button to select "Size", then press the ENTER button.



2 Press the **▲** or **▼** button to select the screen format you want, then press the ENTER button.

Press the EXIT button to exit.



Alternate method

Press the P.SIZE button on the remote control repeatedly to select one of the picture size settings.

- "16 : 9": Sets the picture to 16:9 wide mode.
- "Zoom": Magnify the size of the picture vertically on screen.
- "4 : 3": Sets the picture to 4:3 normal mode.

16 : 9

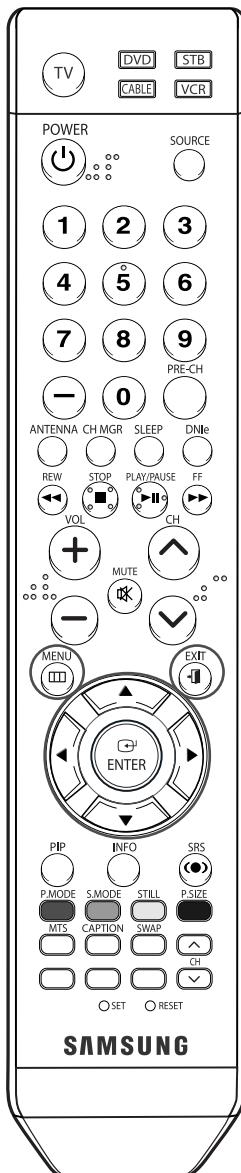
NOTES

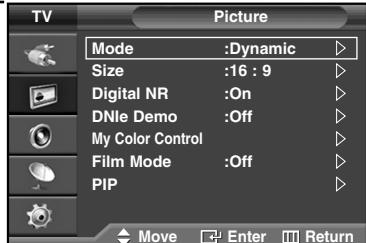
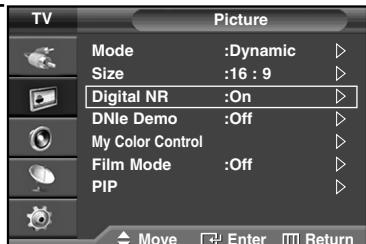
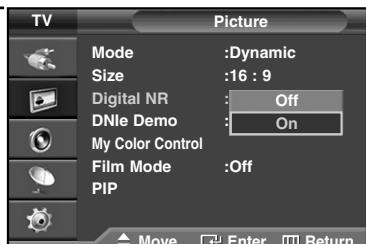
- You can select only the 16:9 and 4:3 screen sizes in the PC, Component or HDMI (720p, 1080i) mode.
- Resizing the screen using the Zoom enables the positioning and sizing of the screen to up/down direction using the **▲** or **▼** button as well as the screen size.
- Move the screen up/down using the **▲** or **▼** button after selecting the **▲** by pressing the **◀** or **▶** button.
- Resize the screen vertically using the **▲** or **▼** button after selecting the **▼** by pressing the **◀** or **▶** button.

Picture Control

Digital Noise Reduction

If the broadcast signal received by your TV is weak, you can activate the Digital Noise Reduction feature to help reduce any static and ghosting that may appear on the screen.

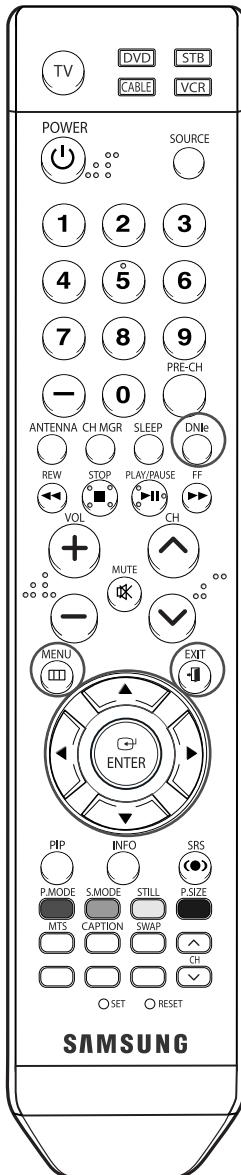


- 1 Press the MENU button.
Press the **▲** or **▼** button to select "Picture", then press the ENTER button.

- 2 Press the **▲** or **▼** button to select "Digital NR", then press the ENTER button.

- 3 Press the **▲** or **▼** button to select "Off" or "On", then press the ENTER button.
Press the EXIT button to exit.


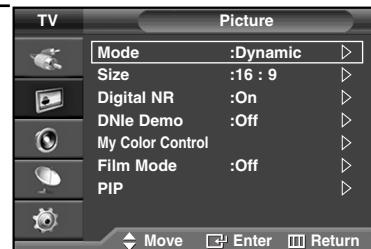
Viewing the DNle Demonstration

This TV includes the DNle function so as to provide a high visual quality.

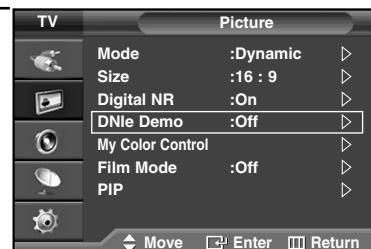
If you set DNle Demo to On, you can view an applied DNle and a normal picture on the screen, for demonstration purposes. Using this function, you can view the difference in the visual quality.



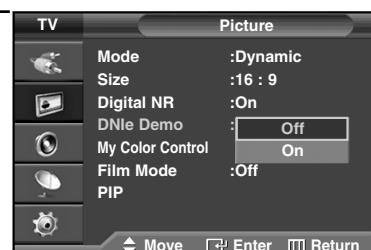
1 Press the MENU button.
Press the **▲** or **▼** button to select "Picture", then press the ENTER button.



2 Press the **▲** or **▼** button to select "DNle Demo", then press the ENTER button.



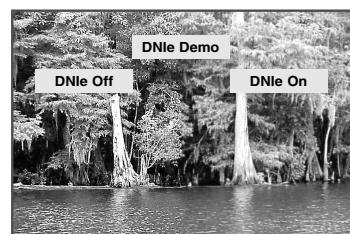
3 Press the **▲** or **▼** button to select "Off", or "On", then press the ENTER button.
Press the EXIT button to exit.



Alternate method

Press the DNle button on the remote control repeatedly to select one of the settings.

- On: Switches on the DNle Demo mode.
- Off: Switches off the DNle Demo mode.



NOTES

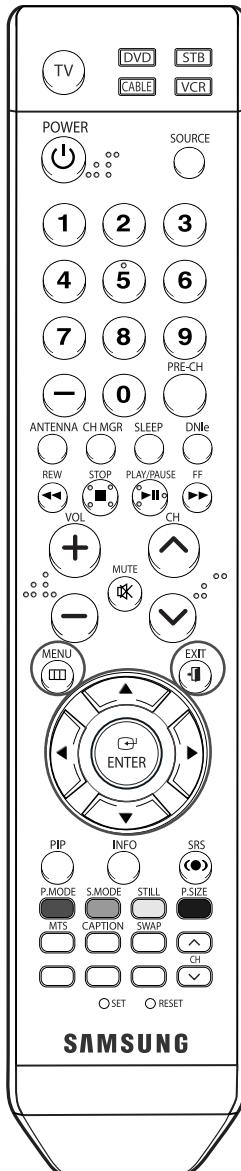
- DNle™ (Digital Natural Image engine) **DNle™**
This feature brings you more a detailed image with 3D noise reduction and detail, contrast and white enhancement.
- This function doesn't work when the Input Source is PC.

Picture Control

Setting the My Color Control Mode

My Color Control allows you to adjust colors according to your preference, by adjusting skin, sky, and grass tones using the predefined settings ("Blue", "Green", "Pink", "Standard", and "Custom") without affecting other colors on the screen.

Using the Easy Control Menu



1 Press the MENU button. Press the **▲** or **▼** button to select "Picture", then press the ENTER button.

2 Press the **▲** or **▼** button to select "My Color Control", then press the ENTER button.

3 Press the ENTER button to select "Easy Control". Press the **◀** or **▶** button to select one of the picture settings you want. The original picture (before adjustment) is shown on the left side, while the picture after adjustment is shown on the right side, and an adjustment bar is shown on the bottom of the screen.

Press the ENTER button to accept the selected mode.

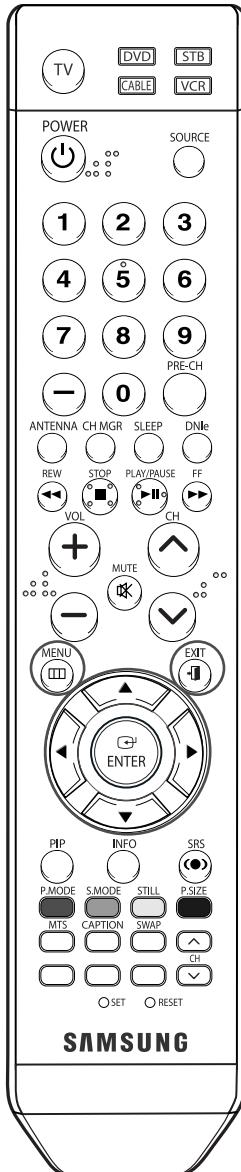
Press the EXIT button to exit.

- "Blue": Emphasizes Clear Blues.
- "Green": Emphasizes Mild Greens.
- "Pink": Emphasizes Warm Skin Colors.
- "Standard": Standard Picture.
- "Custom": Factory default setting.

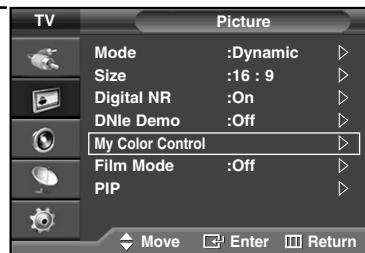
NOTES

- Changing the settings in the "Detail Control" menu (see next page) will automatically set the My Color Control mode to "Custom".
- Pressing the ENTER button on the remote control for 3 seconds when there is no OSD on the screen will display the My Color Control menu.
- The My Color Control is not available in PC mode.

Custom Settings



1 Press the MENU button.
 Press the **▲** or **▼** button to select "Picture", then press the ENTER button.
 Press the **▲** or **▼** button to select "My Color Control", then press the ENTER button.

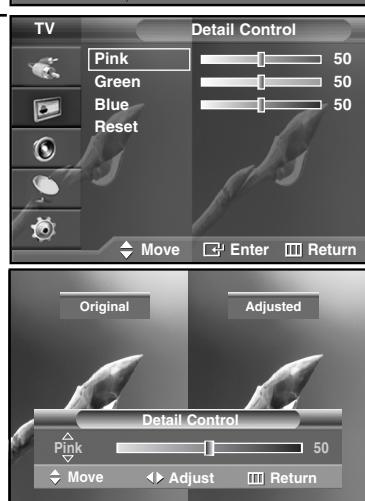


2 Press the **▲** or **▼** button to select "Detail Control", then press the ENTER button.



3 Press the **▲** or **▼** button to select the desired My Color Control, then press the ENTER button.
 There are three colors: "Pink", "Green" and "Blue".

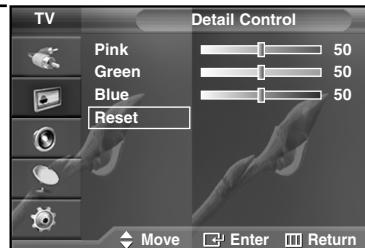
Press the **◀** or **▶** button to adjust the value of the color selected.
 Changing the adjustment value will refresh the adjusted screen.



Resetting the My Color Control Colors to the Factory Defaults

You can return to the factory default settings for My Color Control colors.

4 Press the MENU button to display the "Detail Control" menu.
 Press the **▲** or **▼** button to select "Reset", then press the ENTER button.
 The previously adjusted My Color Control colors will be reset to the factory defaults.

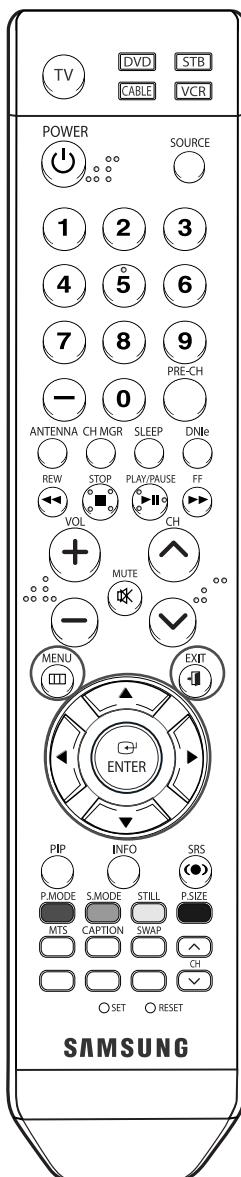


Press the EXIT button to exit.

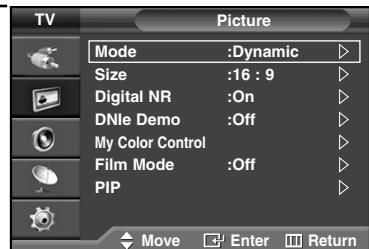
Picture Control

Setting the Film Mode

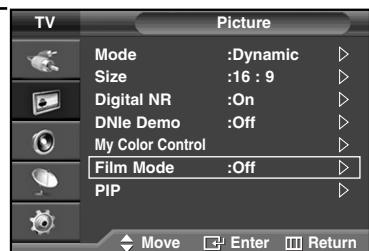
You can automatically sense and process film signals from all sources and adjust the picture for optimum quality.



1 Press the MENU button. Press the **▲** or **▼** button to select "Picture", then press the ENTER button.

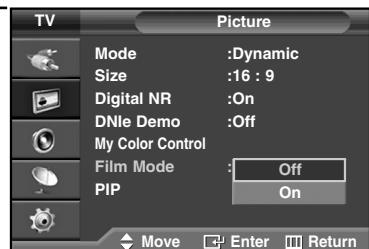


2 Press the **▲** or **▼** button to select "Film Mode", then press the ENTER button.



3 Press the **▲** or **▼** button to select "Off" or "On", then press the ENTER button.

Press the EXIT button to exit.



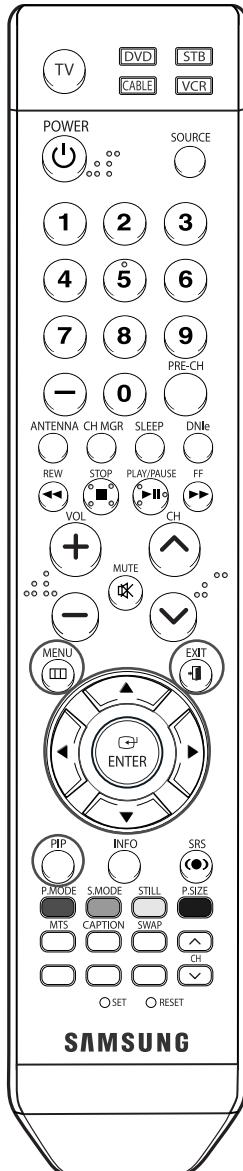
NOTE

- The Film Mode is not available in PC, Component (except 480i, 576i), or HDMI mode.

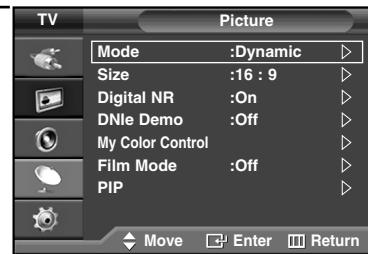
Viewing Picture-In-Picture

One of the best features of your TV is the Picture-In-Picture (PIP) feature. The advanced PIP system allows you to watch two different pictures at once, even if you don't have a VCR or DVD connected to your TV.

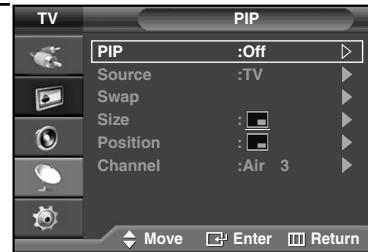
Selecting the PIP Screen



1 Press the MENU button.
Press the **▲** or **▼** button to select "Picture", then press the ENTER button



2 Press the **▲** or **▼** button to select "PIP", then press the ENTER button.

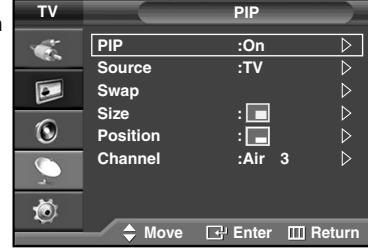


3 Press the ENTER button, then press the **▲** or **▼** button to select "On", then press the ENTER button.

The PIP image will appear in the corner of the screen.

- Pressing the **▲** or **▼** button will alternate between "On" and "Off".

Press the EXIT button to exit.



Alternate method

Press the PIP button on the remote control repeatedly to activate or deactivate the PIP.

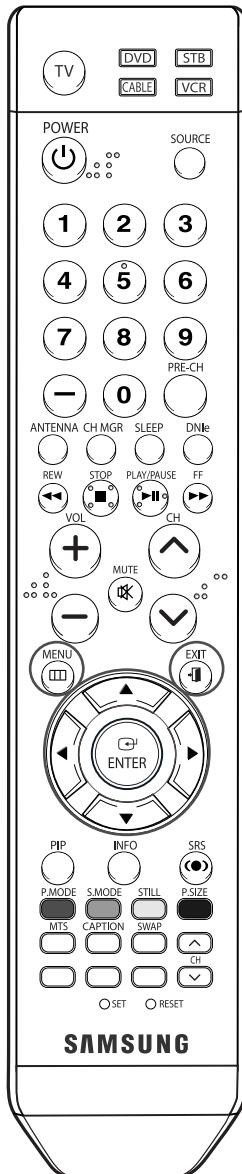
NOTES

- If you turn the TV off while watching and turn it on again, then the mode will return to normal video.
- PIP is supported even when both the main and the sub pictures are analog. For more information, refer to the PIP Settings table on page 65.

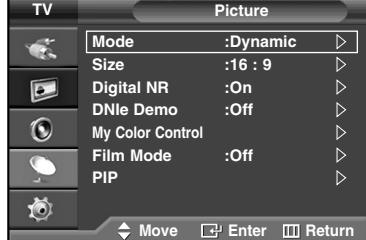
Picture Control

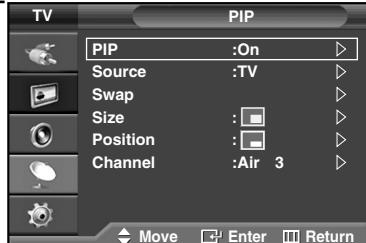
Selecting an External Signal

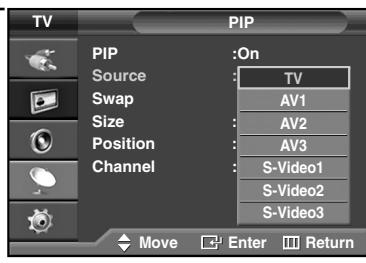
You can use PIP to view a signal from an external source, such as a VCR.



- 1 Press the MENU button.
Press the **▲** or **▼** button to select "Picture", then press the ENTER button.


- 2 Press the **▲** or **▼** button to select "PIP", then press the ENTER button.


- 3 Press the **▲** or **▼** button to select "Source", then press the ENTER button.


- 4 Press the **▲** or **▼** button to cycle through all of the available signal sources: "TV", "AV1", "AV2", "AV3", "S-Video1", "S-Video2", or "S-Video3".

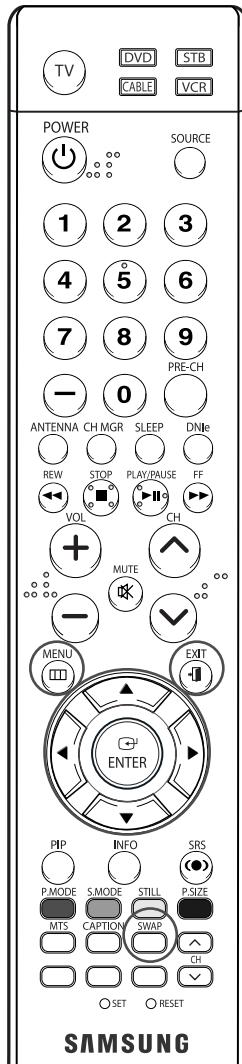
 - The signal from these inputs will not appear if you have not connected any equipment to the TV's respective input jacks.

Press the EXIT button to exit.

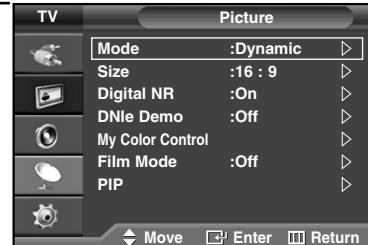
NOTES

- The same source cannot be selected on both the main and sub screens.
- Component1, Component2, PC, or HDMI is not available in PIP picture.

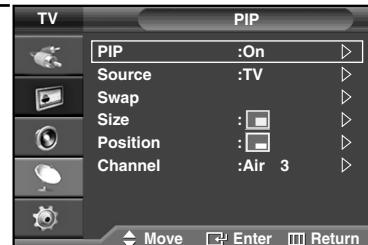
Swapping the Sub (PIP) Picture and Main Picture



1 Press the MENU button.
Press the **▲** or **▼** button to select "Picture", then press the ENTER button

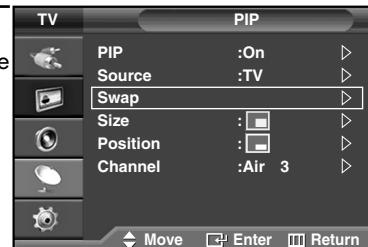


2 Press the **▲** or **▼** button to select "PIP", then press the ENTER button.



3 Press the **▲** or **▼** button to select "Swap", then press the ENTER button.

- The image in the PIP window will appear on the main screen, and vice versa.



Press the EXIT button to exit.

Alternate method

Press the SWAP button on the remote control to interchange the main picture and the sub picture.

PIP Settings

O : PIP and swap operate
X : PIP doesn't operate

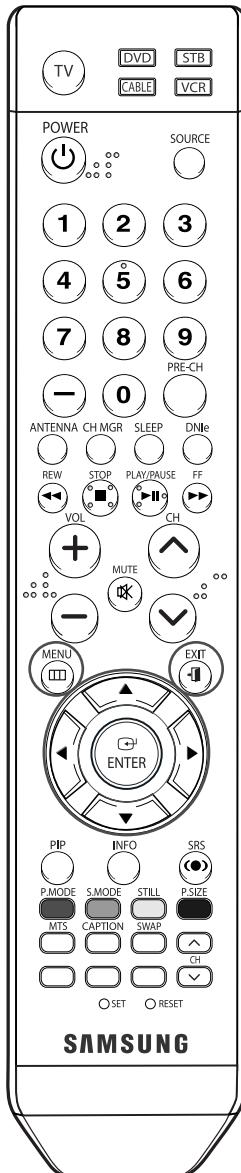
Sub	Main	TV	AV1	AV2	AV3	S-Video1	S-Video2	S-Video3	Component1	Component2	PC	HDMI
TV		X	O	O	O	O	O	O	O	O	O	O
AV1		O	X	O	O	O	O	O	O	O	O	O
AV2		O	O	X	O	O	O	O	O	O	O	O
AV3		O	O	O	X	O	O	O	O	O	O	O
S-Video1		O	O	O	O	X	O	O	O	O	O	O
S-Video2		O	O	O	O	O	X	O	O	O	O	O
S-Video3		O	O	O	O	O	O	X	O	O	O	O
Component1		X	X	X	X	X	X	X	X	X	X	X
Component2		X	X	X	X	X	X	X	X	X	X	X
PC		X	X	X	X	X	X	X	X	X	X	X
HDMI		X	X	X	X	X	X	X	X	X	X	X

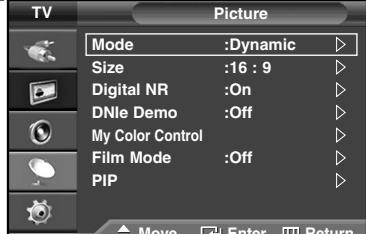
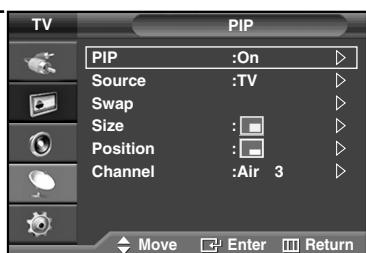
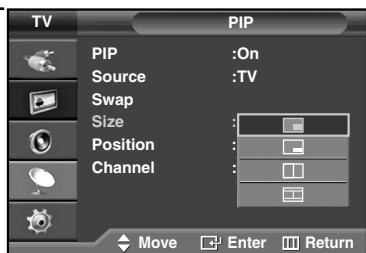
NOTES

- If main and sub picture is same mode, PIP is not available.
- If main picture is in PC, Component1, Component2, or HDMI mode, Swap is not available.

Picture Control

Changing the Size of the Sub (PIP) Picture

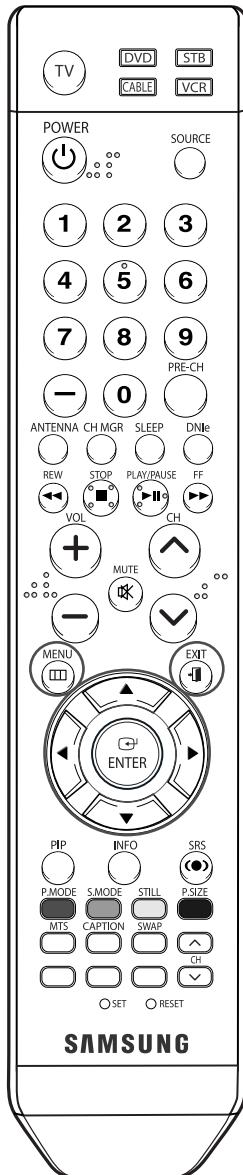


- 1 Press the MENU button.
Press the **▲** or **▼** button to select "Picture", then press the ENTER button.

- 2 Press the **▲** or **▼** button to select "PIP", then press the ENTER button.

- 3 Press the **▲** or **▼** button to select "Size", then press the ENTER button.
Press the **▲** or **▼** button to select option you want, then press the ENTER button.
Press the EXIT button to exit.


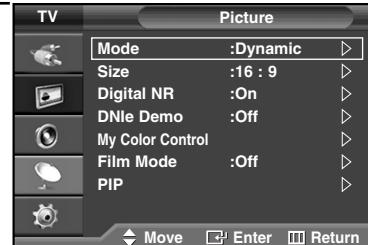
NOTE

- You cannot use the Double size (□, □) function for PC or HDMI mode.

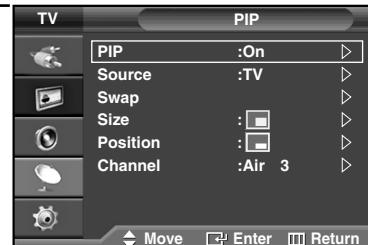
Changing the Location of the Sub (PIP) Picture



1 Press the MENU button.
Press the **▲** or **▼** button to select "Picture", then press the ENTER button.

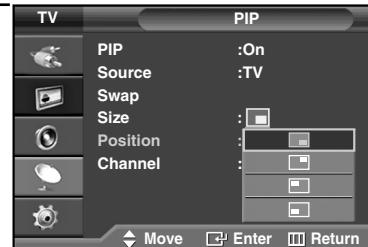


2 Press the **▲** or **▼** button to select "PIP", then press the ENTER button.



3 Press the **▲** or **▼** button to select "Position", then press the ENTER button.

Press the **▲** or **▼** button to select the PIP option you want, then press the ENTER button.



Press the EXIT button to exit.

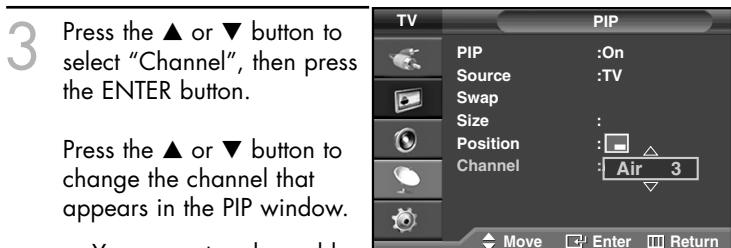
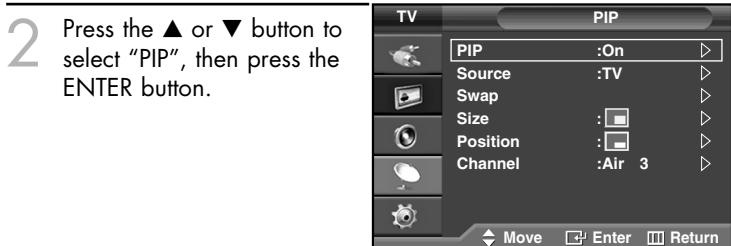
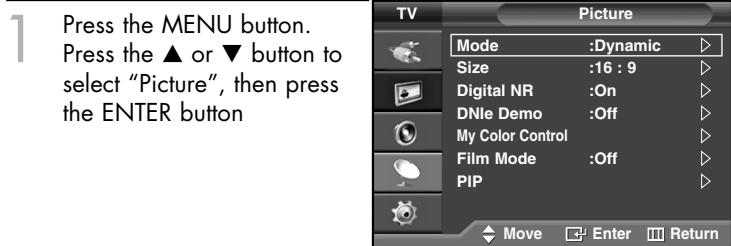
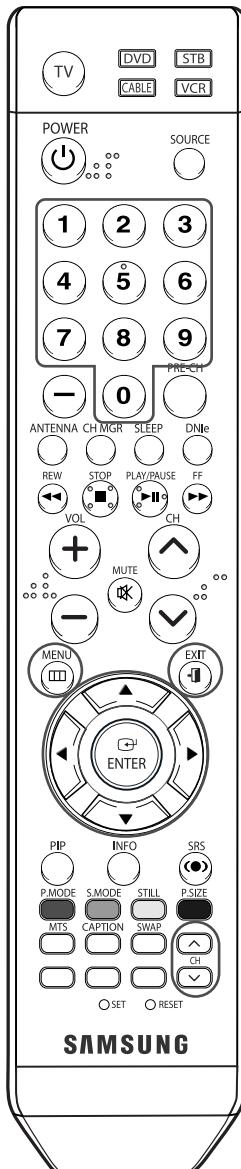
NOTE

- In Double (■■, □□) mode, you cannot set the Position.

Picture Control

Changing the Channel of the Sub (PIP) Picture

After you set the signal source (antenna or cable) of the sub picture, it is easy to change channels.



- You can set a channel by pressing the number buttons on the remote control. This can be performed in the PIP-channel menu.

Press the EXIT button to exit.

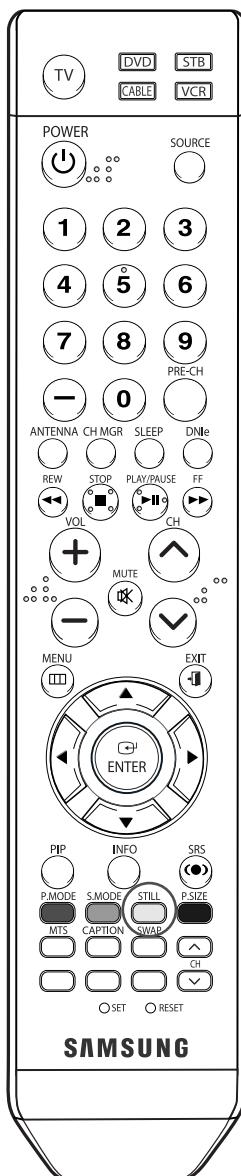
Alternate method

Press the PIP CH **^** or **▼** buttons on the remote control to change the PIP channel.

NOTE

- *Changing PIP Channel is only available when the PIP picture is in TV mode.*

Freezing the Picture



Press the STILL button to freeze a moving picture. (Normal sound will still be heard.)

To cancel this function, press the STILL button again or press any button on the remote control.

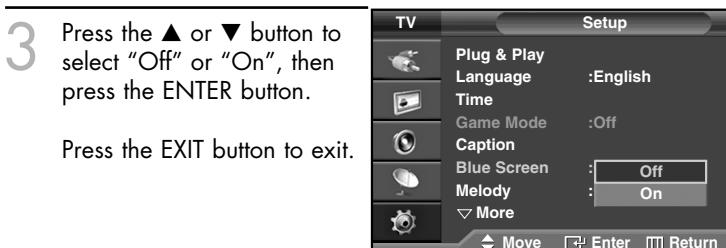
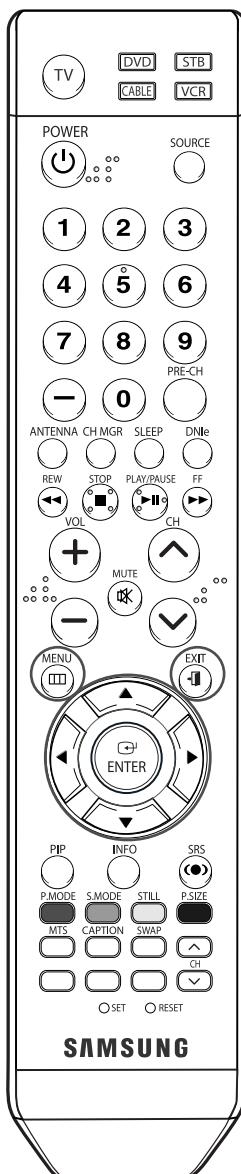
NOTES

- In the PIP mode, the main and sub pictures are stilled at the same time.
- If no signal is being received or the signal is very weak, pressing the STILL button won't freeze a moving picture.

Picture Control

Setting the Blue Screen Mode

If no signal is being received or the signal is very weak, a blue screen automatically replaces the noisy picture background. If you wish to continue viewing the poor picture, you must set the "Blue Screen" mode to "Off".



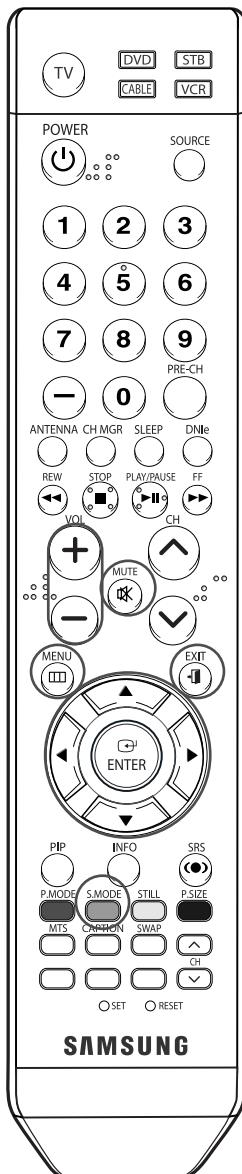


Sound Control

Sound Control

Sound Control

You can control and customize the sound levels and settings of the TV with the remote control.



Adjusting the Volume

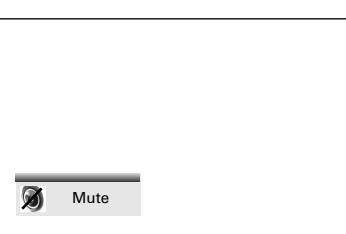
Press the VOL+ or VOL- button to increase or decrease the volume.

Using the MUTE Button

At any time, you can temporarily cut off the sound.

Press the MUTE button on the remote control.

The message "Mute" is displayed and the sound cuts off.

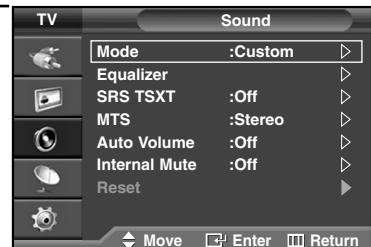


To turn mute off, press the MUTE button again or press either the VOL+ or VOL- button.

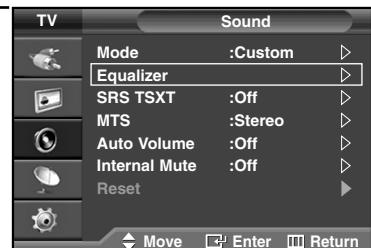
Customizing the Sound

The sound settings can be adjusted to suit your personal preference. (Alternatively, you can use one of the automatic settings. See next page.)

- 1 Press the MENU button. Press the ▲ or ▼ button to select "Sound", then press the ENTER button.



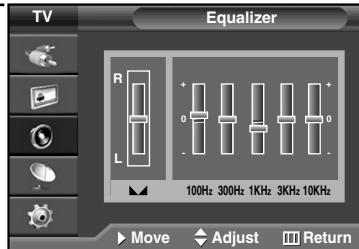
- 2 Press the ▲ or ▼ button to select "Equalizer", then press the ENTER button.



Continued...

3 Press the **◀** or **▶** button to select a particular item to be changed.
Press the **▲** or **▼** button to increase or decrease the selected frequency.

Press the **EXIT** button to exit.



NOTES

- If you make any changes to the equalizer settings, the sound mode is automatically switched to the custom mode.
- **L/R Sound Balance Adjustment**
To adjust the sound balance of the L/R speakers.
- **Bandwidth Adjustment (100Hz, 300Hz, 1KHz, 3KHz, 10KHz)**
To adjust the level of different bandwidth frequencies.

Using Automatic Sound Settings

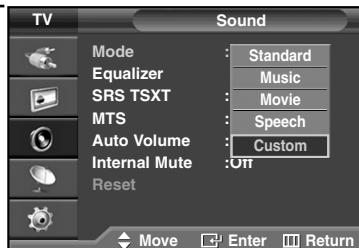
Your TV has automatic sound settings ("Standard", "Music", "Movie", and "Speech") that are preset at the factory. You can select "Custom", which automatically recalls your personalized sound settings.

1 Press the **MENU** button.
Press the **▲** or **▼** button to select "Sound", then press the **ENTER** button.



2 Press the **ENTER** button to select "Mode".
Press the **▲** or **▼** button to select a particular item, then press the **ENTER** button.

Press the **EXIT** button to exit.



Alternate method

Press the **S.MODE** button on the remote control repeatedly to select one of the standard sound settings.

NOTES

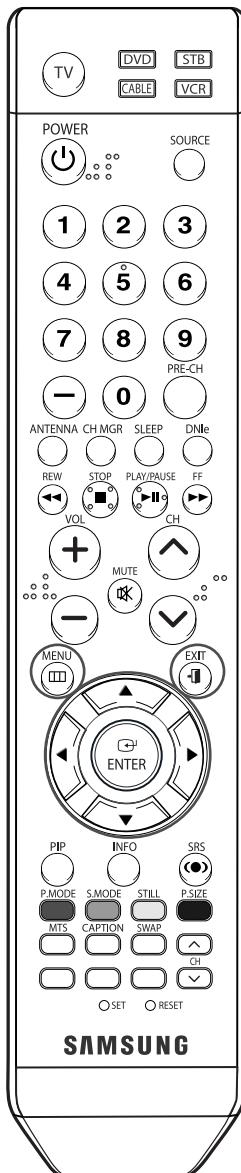
- Choose "Standard" for the standard factory settings.
- Choose "Music" when watching music videos or concerts.
- Choose "Movie" when watching movies.
- Choose "Speech" when watching a show that is mostly dialog (i.e., news).
- Choose "Custom" to recall your personalized settings (see "Customizing the Sound", page 72).

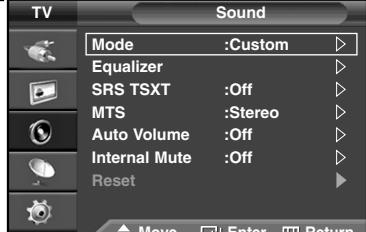
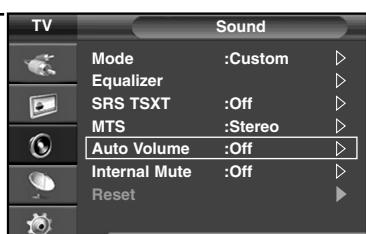
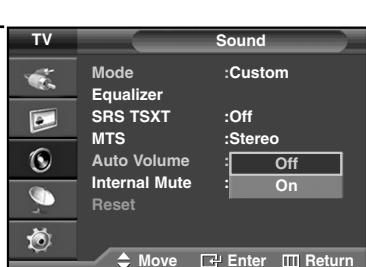


Sound Control

Auto Volume

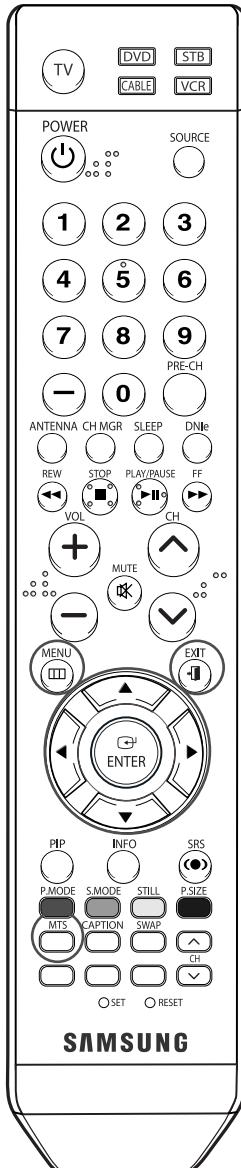
Each broadcasting station has its own signal conditions, and it is inconvenient to adjust the volume every time the channel is changed. "Auto Volume" automatically adjusts the volume of the desired channel by lowering the sound output when the modulation signal is high or by raising the sound output when the modulation signal is low.



- 1 Press the MENU button.
Press the **▲** or **▼** button to select "Sound", then press the ENTER button.

- 2 Press the **▲** or **▼** button to select "Auto Volume", then press the ENTER button.

- 3 Press the **▲** or **▼** button to select "Off" or "On", then press the ENTER button.
Press the EXIT button to exit.


Choosing a Multi-Channel Sound (MTS) track

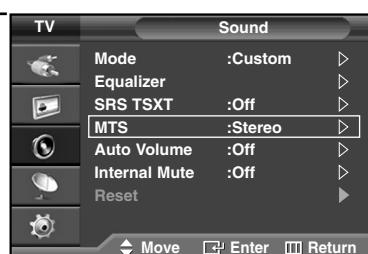
Depending on the particular program being broadcast, you can listen to Mono, Stereo or SAP.



1 Press the MENU button.
Press the ▲ or ▼ button to select "Sound", then press the ENTER button.

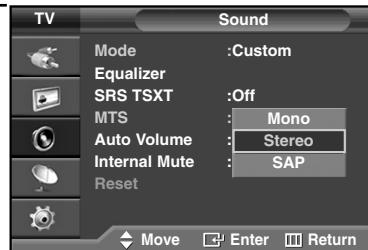


2 Press the ▲ or ▼ button to select "MTS", then press the ENTER button.



3 Press the ▲ or ▼ button to select a setting you want, then press the ENTER button.

Press the EXIT button to exit.



Alternate method

Press the MTS button on the remote control repeatedly to select an external signal source.

Stereo

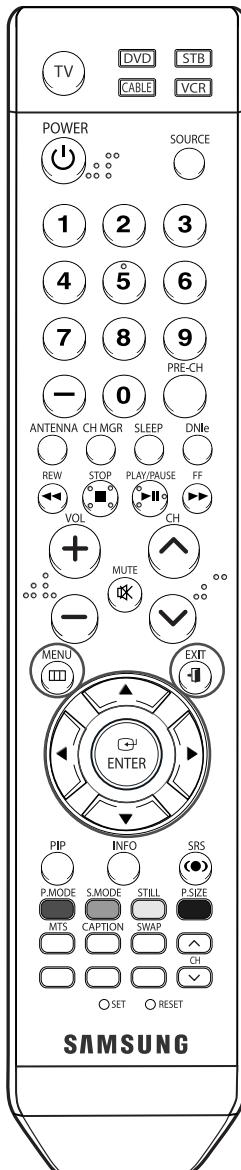
NOTES

- Choose "Mono" for channels that are broadcasting in mono, or if you are having difficulty receiving a stereo signal.
- Choose "Stereo" for channels that are broadcasting in stereo.
- Choose "SAP" to listen to the Separate Audio Program, which is usually a foreign-language translation.

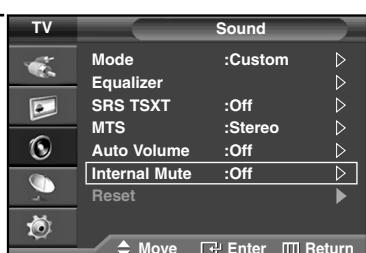
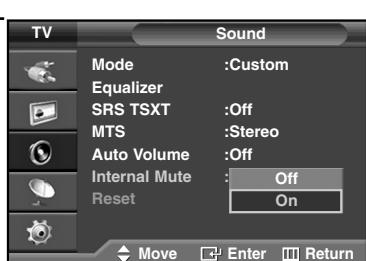
Sound Control

Selecting the Internal Mute

When using a device such as a Home Theater or an Amplifier with external speakers, you can set Internal Mute to On to cut off sound from the TV's internal speakers.



- 1 Press the MENU button.
Press the **▲** or **▼** button to select "Sound", then press the ENTER button.

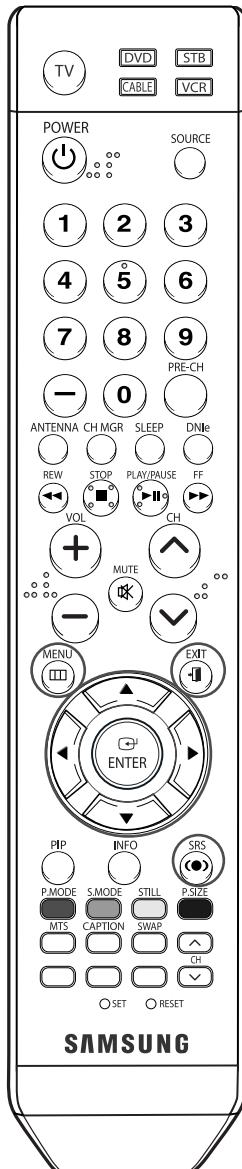
- 2 Press the **▲** or **▼** button to select "Internal Mute", then press the ENTER button.

- 3 Press the **▲** or **▼** button to select "On", then press the ENTER button.
Pressing the **▲** or **▼** button will alternate between "Off" and "On".
Press the EXIT button to exit.


NOTES

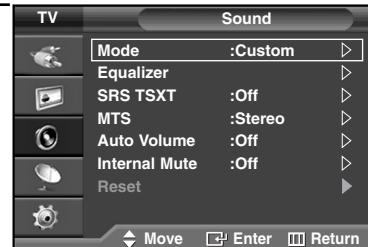
- The VOL +, VOL - and MUTE buttons do not operate when the Internal Mute is set to On.
- When Internal Mute is set to "On", Sound menus except MTS and Internal Mute options cannot be adjusted.

Setting the SRS TSXT

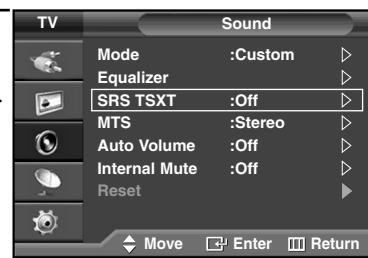
TruSurround XT is a patented SRS technology that solves the problem of playing 5.1 multichannel content over two speakers. Trusurround delivers a compelling, virtual surround sound experience through any two-speaker playback system, including internal television speakers. It is fully compatible with all multichannel formats.



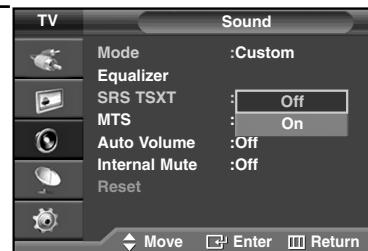
1 Press the **MENU** button.
Press the **▲** or **▼** button to select "Sound", then press the **ENTER** button.



2 Press the **▲** or **▼** button to select "SRS TSXT", then press the **ENTER** button.



3 Press the **▲** or **▼** button to select "Off" or "On", then press the **ENTER** button.
Press the **EXIT** button to exit.



Alternate method

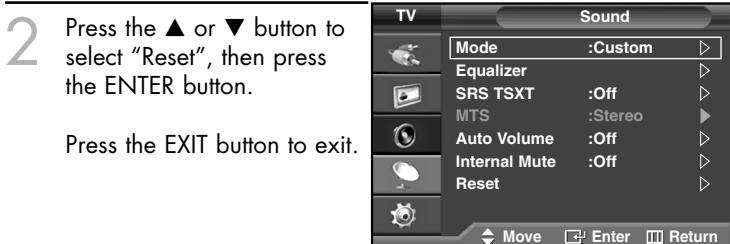
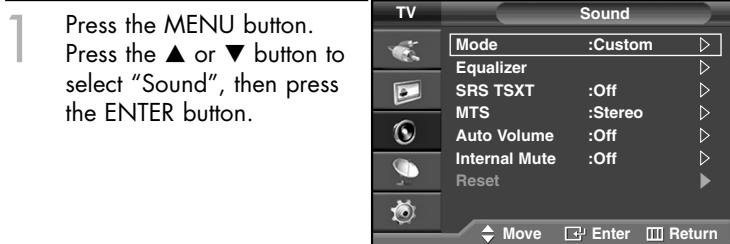
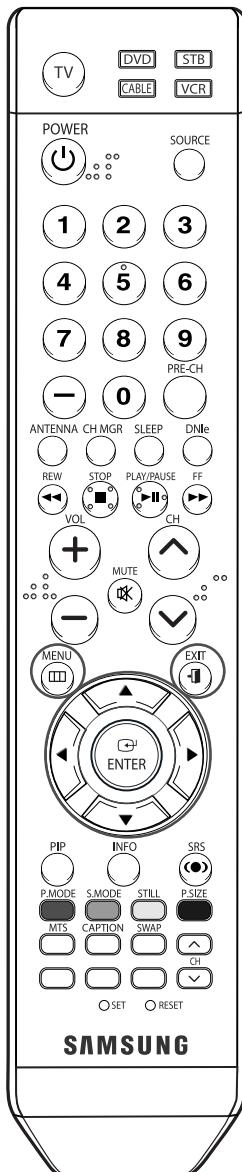
Press the SRS button on the remote control repeatedly to select "Off" or "On".

SRS TSXT : Off

Sound Control

Sound Reset

If Game Mode is On (Refer to page 80), the Reset Sound function is activated. Selecting the Reset function after setting the equalizer resets the equalizer to the factory defaults.



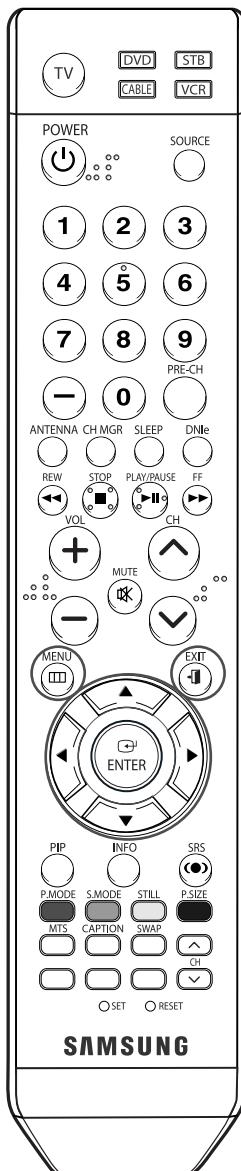


Special Features

Special Features

Using Game Mode

When connecting to a game console such as PlayStation™ or Xbox™, you can enjoy a more realistic gaming experience by selecting the game mode to on.



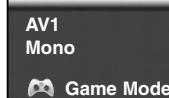
- 1** Press the MENU button.
Press the **▲** or **▼** button to select "Setup", then press the ENTER button.

- 2** Press the **▲** or **▼** button to select "Game Mode", then press the ENTER button.

- 3** Press the **▲** or **▼** button to select "Off" or "On", then press the ENTER button.
Press the EXIT button to exit.


Restrictions on Game Mode (Caution)

- To disconnect the game console and connect another external device, set Game Mode to Off in the setup menu.
- If you display the TV menu in Game mode, the screen shakes slightly.
- The mark (🎮) appears on the screen which means that Game Mode is on with the selected source.



If Game Mode is On

- Picture Mode is automatically changed to Custom and users cannot change the mode.
- Adjust the sound using the equalizer.
- The Reset Sound function is activated. Selecting the Reset function after setting the equalizer resets the equalizer to the factory defaults.

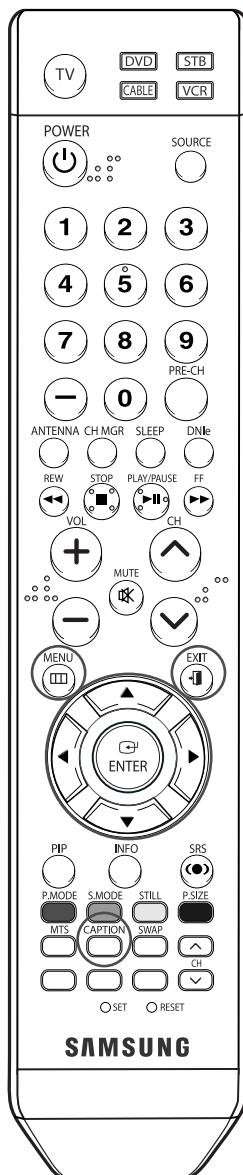
NOTES

- Game Mode is available for all external input sources.
- For component and HDMI input, game mode supports a resolution of up to 720p.

Viewing Closed Captions (On-Screen Text Messages)

Your TV decodes and displays the closed captions that are broadcast with certain TV shows. These captions are usually subtitles for the hearing impaired or foreign language translations. All VCRs record the closed caption signal from television programs, so home-recorded video tapes also provide closed captions. Most prerecorded commercial video tapes provide closed captions as well. Check for the closed caption symbol in your television schedule and on the tape's packaging: **[cc]**.

Note: The Caption feature does not work with DVD or DTV signals.



1 Press the MENU button.
 Press the **▲** or **▼** button to select "Setup", then press the ENTER button.
 Press the **▲** or **▼** button to select "Caption", then press the ENTER button.



2 Press the ENTER button to select "Caption".
 Press the **▲** or **▼** button to select "On", then press the ENTER button.



3 Press the **▲** or **▼** button to select "Mode", then press the ENTER button.
 Press the **▲** or **▼** button to select "Text" or "Caption", then press the ENTER button.



Continued...

Special Features

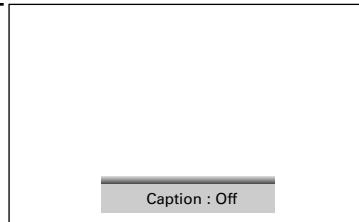
4 Depending on the particular broadcast, it might be necessary to make changes to "Channel" and "Field":
Press the **▲/▼/◀/▶** button to make the changes. (Follow the same procedure as in steps 3 above.)

Press the EXIT button to exit.



Alternate method

Press the CAPTION button on the remote control repeatedly to select "On" or "Off".

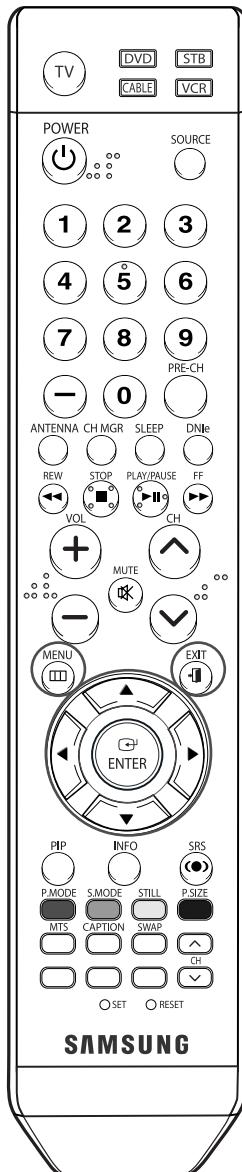


NOTES

- Different channels and fields display different information: Field 2 carries additional information that supplements the information in Field 1.
(For example, Channel 1 may have subtitles in English, while Channel 2 has subtitles in Spanish.)
- The Caption feature doesn't work in Component, PC, HDMI modes.
- The availability of captions depends on the program being broadcast.

Setting the On/Off Melody

A melody sound can be set to come on when the TV is powered on or off.



1 Press the MENU button.
Press the **▲** or **▼** button to select "Setup", then press the ENTER button.



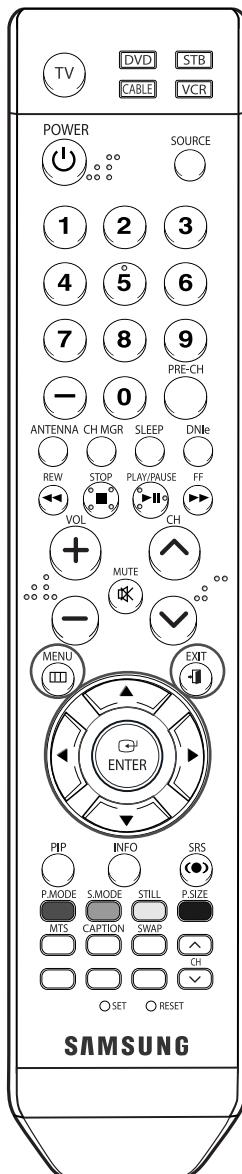
2 Press the **▲** or **▼** button to select "Melody", then press the ENTER button.
Press the **▲** or **▼** button to select "Off" or "On", then press the ENTER button.
Press the EXIT button to exit.



Special Features

Activating Panel Button Lock

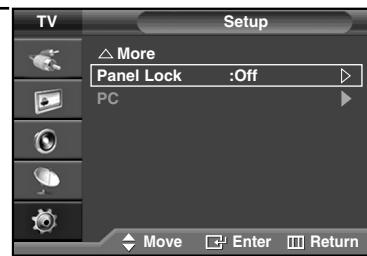
This feature allows you to lock the TV panel buttons so that it cannot be operated via the TV panel. It can, however, still be operated via the remote control. Only remote control can release the panel lock setting, so keep the remote control away from unauthorized users.



1 Press the MENU button.
Press the ▲ or ▼ button to select "Setup", then press the ENTER button.

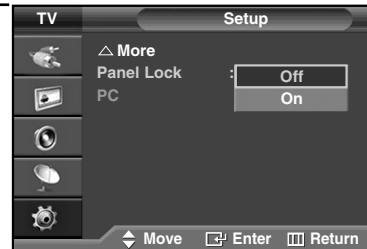


2 Press the ▲ or ▼ button to select "Panel Lock", then press the ENTER button.



3 Press the ▲ or ▼ button to select "Off" or "On", then press the ENTER button.

Press the EXIT button to exit.





PC Display

PC Display

Using Your TV as a Computer (PC) Display

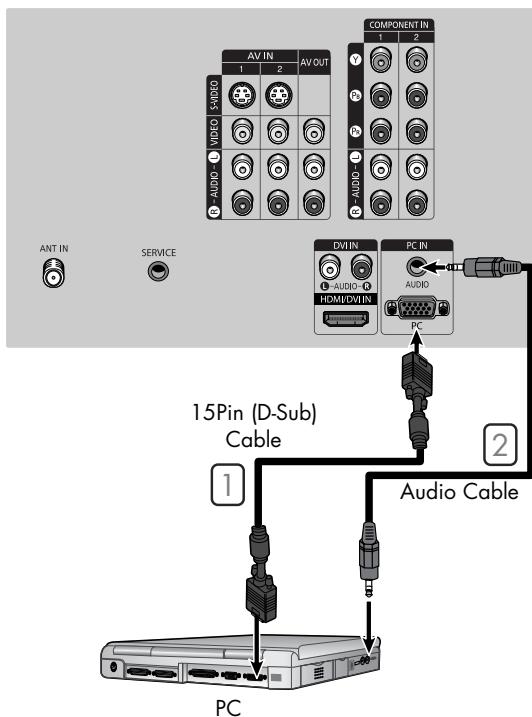
How to Connect Your PC to the TV

This figure shows the Standard Connector-jack panel. The actual configuration on your TV may be different, depending on the model.

Connecting a PC (15p D-SUB) to the TV

- 1 Connect a PC cable between the PC output jack on the PC and the RGB input jack (PC IN) on the TV.
- 2 Connect a Audio cable between the Audio output jack on the PC and the Audio input jack (PC AUDIO IN) on the TV.

TV Rear Panel



NOTE

- You cannot connect this TV to a PC via HDMI/DVI.

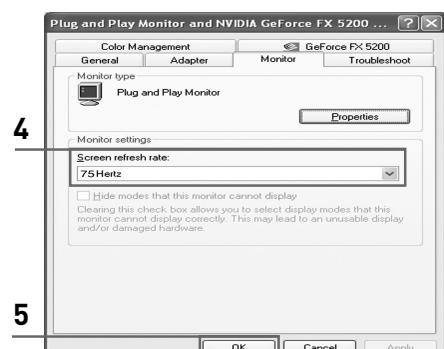
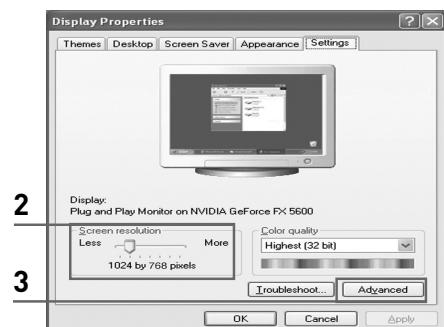
Setting up Your PC Software (Based on Windows XP)

The Windows display-settings for a typical computer are shown below. But the actual screens on your PC will probably be different, depending upon your particular version of Windows and your particular video card. But even if your actual screens look different, the same, basic set-up information will apply in almost all cases. (If not, contact your computer manufacturer or Samsung Dealer.)

1. Right click the mouse on the Windows Desktop, then click on Properties. The Display Properties dialog-box will be displayed.



- 2 Click on Settings, then set the Display Mode with reference to the Display Modes Table. (See next page) You do not need to change the Colors settings.
- 3 Click on Advanced. A new settings dialog box will be displayed.
- 4 Click on the Monitor tab, then set the Screen Refresh Rate with reference to the Display Modes Table. Set the Vertical Frequency and Horizontal Frequency individually if you can do so, instead of setting the Screen Refresh Rate.
- 5 Click "OK", then the dialog-box will disappear. Click "OK" on the "Display Properties" dialog-box.
- 6 Shutdown the PC, and connect it to your TV.
 - * The actual screens on your PC may look different, depending on your particular version of Windows and the type of your PC.
 - * When you use your TV as a PC monitor, it supports Colors up to 32 bits.
 - * In this case, the display on the TV may look different depending on your particular version of Windows or the PC manufacturer.
 - * When connecting a PC, you must set it to the display settings that are supported by the TV. Otherwise, the message "Out of input range" will be displayed.



continued...

PC Display

Display Modes

Both screen position and size will vary depending on the type of PC monitor and its resolution.

The table below shows all of the display modes that are supported:

Mode	Resolution	Horizontal Frequency [KHz]	Vertical Frequency [Hz]	Pixel Clock [MHz]	Sync Polarity (H/V)
VGA	720 x 400	31.47	70.00	28.322	-/-
	640 x 480	31.47	60.00	25.175	-/+
		35.00	66.70	30.24	-/-
		37.86	72.80	31.50	-/-
		37.50	75.00	31.50	-/-
SVGA	800 x 600	43.27	85.00	36.00	-/-
		35.16	56.30	36.00	-+/-
		37.88	60.30	40.00	+/-
		48.08	72.20	50.00	+/-
	832 x 624	46.87	75.00	49.50	+/-
XGA	1024 x 768	53.67	85.10	56.25	+/-
		49.73	74.60	57.284	-/+
		48.36	60.00	65.00	-/-
VESA	1280 x 720	56.40	70.10	75.00	-/-
		57.80	72.00	74.99	-/-
		60.02	75.00	78.75	+/-
		44.70	59.80	74.50	-/+

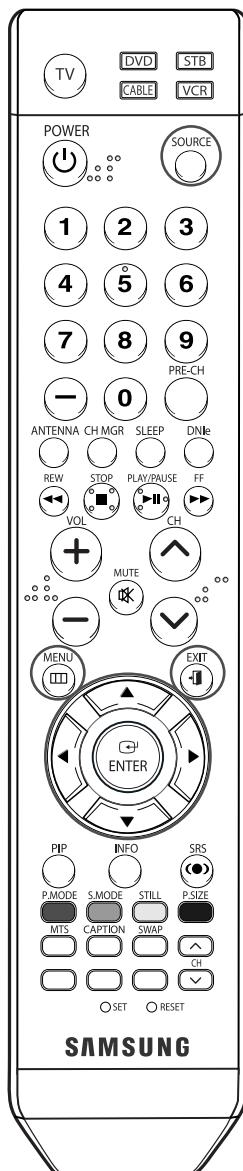
- The interlace mode is not supported.

NOTES

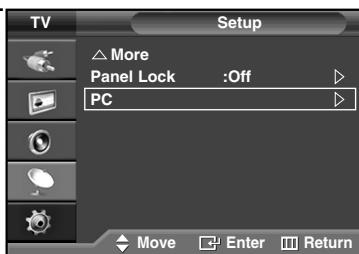
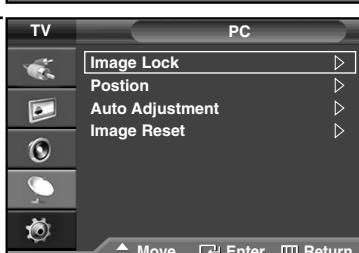
- The PC text quality is optimum in XGA mode (1024 x 768@60Hz).
- 1280 x 720 mode is 16:9 mode.
- When this television is used as a PC display, 24-bit colour is supported (over 16 million colours).
- Your PC display screen might appear different depending on the manufacturer (and your particular version of Windows). Check your PC instruction book for information about connecting your PC to a television.
- If a vertical and horizontal frequency-select mode exists, select 60Hz (vertical) and 31.5kHz (horizontal). In some cases, abnormal signals (such as stripes) might appear on the screen when the PC power is turned off (or if the PC is disconnected). If so, press the SOURCE button to enter the Video mode. Also, make sure that the PC is connected.
- When connecting a notebook PC to the television, make sure that the PC screen is displayed through only the television (Otherwise, random signals might appear). It depends on the note PC model.
- When horizontal synchronous signals seem irregular in PC mode, check PC power saving mode or cable connections.

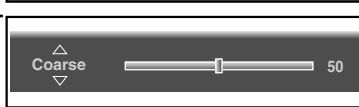
Adjusting the Picture Quality

The purpose of picture quality adjustment is to remove or reduce picture noise. If the noise is not removed by fine tuning alone, then do the frequency adjustments to the utmost and fine tune again. After the noise has been reduced, re-adjust the picture so that it is aligned to the center of screen.



- 1 Press the SOURCE button to select "PC".
- 2 Press the MENU button. Press the **▲** or **▼** button to select "Setup", then press the ENTER button.

- 3 Press the **▲** or **▼** button to select "PC", then press the ENTER button.

- 4 Press the ENTER button to select "Image Lock", then press the ENTER button.

- 5 Press the **▲** or **▼** button to select "Coarse" or "Fine", then press the ENTER button.
 - You can also select these options (Coarse, or Fine) by pressing the **▲** or **▼** button.

- 6 Press the **◀** or **▶** button to remove the picture noise.


NOTE

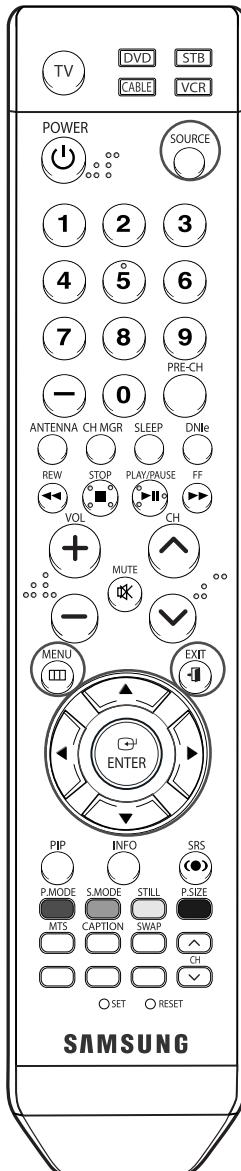
- This feature may change the width of the image. If necessary, adjust the position to center.

Press the EXIT button to exit.

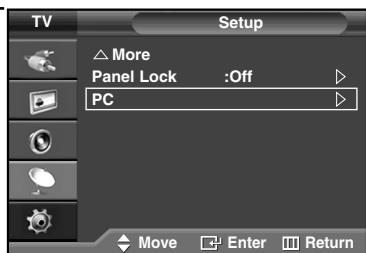
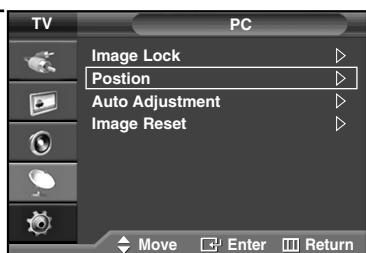
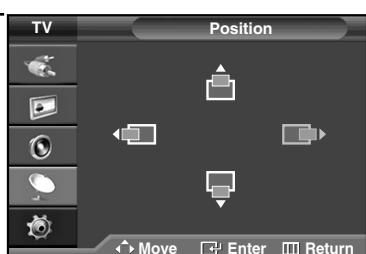
PC Display

Changing the Picture Position

After connecting the TV to your PC, adjust the position of picture if it is not well-aligned.

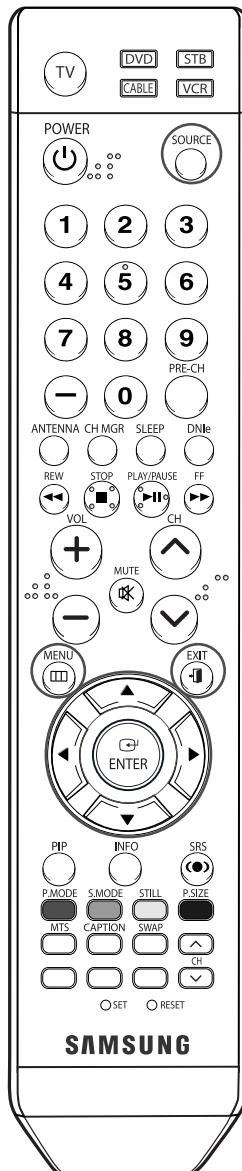


- 1 Press the SOURCE button to select "PC".
- 2 Press the MENU button.
Press the **▲** or **▼** button to select "Setup", then press the ENTER button.

- 3 Press the **▲** or **▼** button to select "PC", then press the ENTER button.

- 4 Press the **▲** or **▼** button to select "Position", then press the ENTER button.

- 5 Adjust the position of picture by pressing the **▲/▼/◀/▶** button.
Press the EXIT button to exit.


Adjusting the Picture Quality and Position Automatically

This feature allows the TV to self-adjust to the incoming video signal. The values of fine, coarse and position are adjusted automatically.



1 Press the SOURCE button to select "PC".

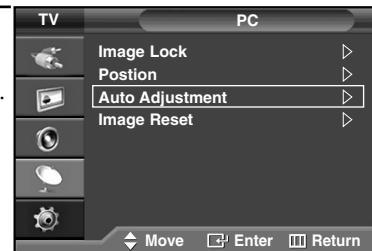
2 Press the MENU button. Press the **▲** or **▼** button to select "Setup", then press the ENTER button.



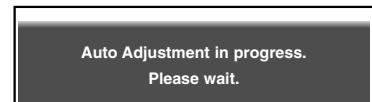
3 Press the **▲** or **▼** button to select "PC", then press the ENTER button.



4 Press the **▲** or **▼** button to select "Auto Adjustment", then press the ENTER button. The picture quality and position are automatically adjusted, and the picture returns to original view a few seconds later.



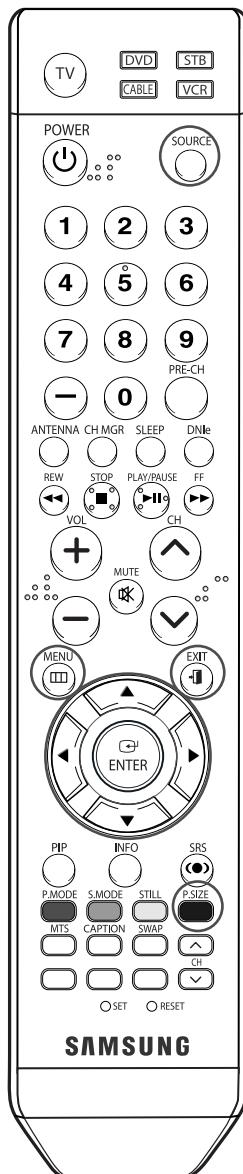
Press the EXIT button to exit.



PC Display

Changing the Picture Size (PC Mode)

You can select the picture size which best corresponds to your viewing requirements.



- 1 Press the SOURCE button to select "PC".
- 2 Press the MENU button.
Press the **▲** or **▼** button to select "Picture", then press the ENTER button.
Press the **▲** or **▼** button to select "Size", then press the ENTER button.
- 3 Press the **▲** or **▼** button to select the screen format you want, then press the ENTER button.
Press the EXIT button to exit.

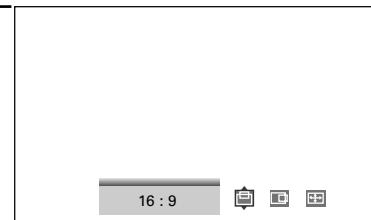


NOTES

- "16 : 9": Sets the picture to 16:9 wide mode. Press the **►** button. The picture position (□, □) and size (□) adjustment are able in these mode by pressing the **▲/▼/◀/►** button.
- "4 : 3": Sets the picture to 4:3 wide mode. Press the **►** button. The picture position (□, □) and size (□) adjustment are able in these mode by pressing the **▲/▼/◀/►** button.

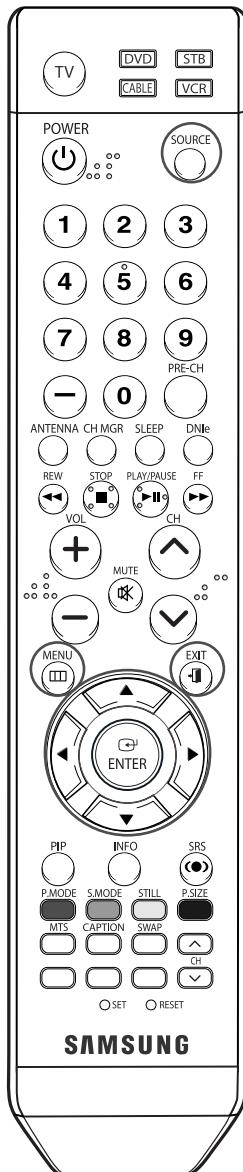
Alternate method

Press the P.SIZE button on the remote control repeatedly to change the picture Size.



Initializing the Picture Settings

You can replace all picture settings with the factory default values.

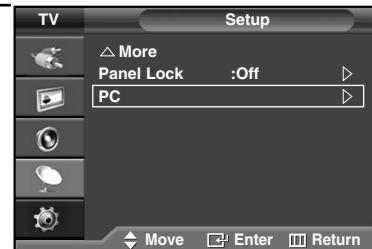


1 Press the SOURCE button to select "PC".

2 Press the MENU button.
Press the **▲** or **▼** button to select "Setup", then press the ENTER button.

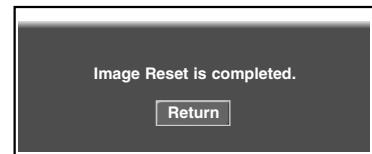
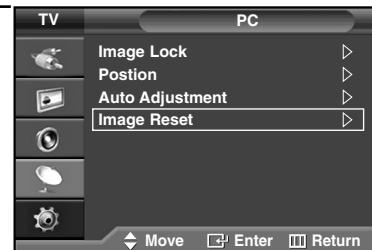


3 Press the **▲** or **▼** button to select "PC", then press the ENTER button.



4 Press the **▲** or **▼** button to select "Image Reset", then press the ENTER button.
The picture settings are replaced with the factory default values.

Press the EXIT button to exit.



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Appendix

Appendix

Replacing the Lamp

- **Why do I need to replace the lamp?**

The lamp used in a DLP TV has a limited lifespan. For the best screen quality it needs to be replaced periodically. After replacing the lamp, the screen quality will be bright and clear as new.

- **When do I need to replace it?**

It should be replaced when the screen becomes darker, less clear or when all three LEDs on the front (TIMER, LAMP, and STAND BY/TEMP) are flashing.

- **Check before lamp replacement**

1. The lamp must be the same code number and type.
2. The lamp type is indicated on the right side of the TV. It is also indicated on the lamp case.
3. After checking the code number for the lamp, give the code number to the store where you purchased the TV or to a Samsung Service center.

- **Caution**

1. Replace with the correct code numbered lamp to avoid damage to the TV.
2. Turn the power off and wait for 30 minutes before replacing the lamp as it will be hot.
3. Do not touch the glass part of the lamp with your bare hands or insert any foreign object inside the cover as it may cause poor screen quality, electric shock or fire.
4. Do not place the old lamp near flammable objects or within the reach of children.
5. Be sure to connect this TV directly to an AC wall outlet. If the TV's AC plug is connected to a cable box or other source, it will not allow for proper cool down time.

- For replacement, you will need a 5.91-Inch screwdriver and a pair of gloves.

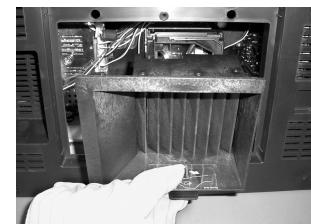
1 Unplug TV, then use a screwdriver to remove the screws.



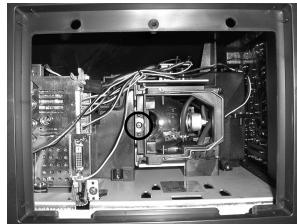
2 Remove the Lamp cover.



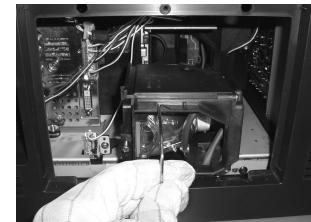
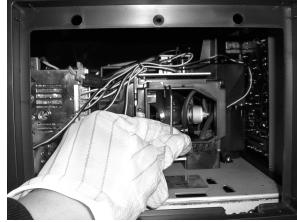
3 Remove the Lamp cover duct holding the locker and pulling it out.



4 Remove the screw securing the Lamp by using a screwdriver.



5 Separate the Lamp from the engine by holding the handle and pulling it out.



NOTES

- Be sure the replacement Lamp is the same type.
- After replacing the lamp, align the lamp cover with the groove and secure the screws.
- The TV will not turn on if the lamp cover is not correctly closed (as this will activate the protective circuit).

Appendix

Troubleshooting

If the TV seems to have a problem, first try this list of possible problems and solutions. If none of these troubleshooting tips apply, then call your nearest Samsung authorized service center.

Problem	Possible Solution
Poor picture quality.	Try another channel. Adjust the antenna. Check all wire connections.
Poor sound quality.	Try another channel. Adjust the antenna. Make sure the MUTE button is off.
No picture or sound.	Try another channel. Press the SOURCE button. Make sure the TV is plugged in. Check the antenna connections. Check that the Mute feature is off.
No color, wrong colors or tints.	Make sure the program is broadcasted in color. Adjust the picture settings.
Picture rolls vertically.	Adjust the antenna. Check all wire connections. If you are using a VCR, check the tracking.
The TV operates erratically.	Unplug the TV for 30 seconds, then try operating it again.
Your remote control does not operate your TV.	Press the "TV" button to put your remote control into "TV" mode. Make sure the remote has batteries.
The TV won't switch on.	Make sure the wall outlet is working. Make sure the TV is plugged in. Make sure the remote has batteries.
Digital broadcasting screen problem.	Please check the digital signal strength and input antenna.
The visual qualities of digital channels vary.	The visual qualities of digital channels may vary depending on the original production method (analog or digital). → If the original production method is digital: High visual quality program. → If the original production method is analog: The digital program displayed on the screen is originally an analog program which has been converted. The visual quality is of an SD grade.
Although the TV caption shows HD, the visual quality is not satisfactory.	The HD caption that appears when switching channels or when pressing the Information button on the remote control means the selected channel is simply a digital channel. If the broadcasting station converts an analog signal into digital and transmits the signal, the visual quality may not be perfect. (Applied to Set Top Box built-in model only.)

- The display panel used for the DLP TV is composed of many tiny pixels. These pixels may occasionally appear on the screen.

Cleaning and Maintaining Your TV

Please follow these guidelines to get the maximum performance from your TV.

Placement

- Do not put the TV near extremely hot, cold, humid or dusty places.
- Do not place the TV near appliances with electric motors that create magnetic fields, such as vacuum cleaners.
- Keep the ventilation openings clear; do not place the TV on a soft surface, such as cloth or paper.
- Place the TV in a vertical position only.

Liquids

- Do not handle liquids near or on the TV. Liquids that spill into it can cause serious damage.

Cabinet

- Never open the cabinet or touch the parts inside.
- Wipe your TV with a clean, dry cloth. Never use water, cleaning fluids, wax, or chemicals.
- Do not put heavy objects on top of the cabinet.
- This DLP TV projects the image onto a large screen by applying an optical system.
If you place the TV set face down, it might cause a problem because dirt, or some other contaminant may become attached to the inside of the TV set.

Temperature

- If your TV is suddenly moved from a cold to a warm place, unplug the power cord, and allow at least two hours for moisture that may have formed inside the unit to dry completely.

Using Your TV in Another Country

If you plan to take your TV with you to a foreign country, please be aware of the different television systems that are in use around the world. A TV designed for one system may not work properly with another system due to differences in the TV channel frequencies.

Specifications

Model	SP-50L6HV	SP-50K3HV	SP-56K3HV	SP-61K3HV	SP-67L6HV
Voltage	AC 100-240V±10%				
Frequency of Operation	60/50Hz				
Power Consumption	190 watts				
Dimensions (W x D x H)	46.54 x 14.00 x 34.25 inches 1182 x 355.5 x 870 mm	45.43 x 15.63 x 32.30 inches 1154 x 397 x 820.5 mm	50.87 x 16.34 x 35.67 inches 1292 x 415 x 906 mm	60.63 x 22.44 x 43.39 inches 1540 x 570 x 1102 mm	62.36 x 19.78 x 45.06 inches 1584 x 502.5 x 1144.5 mm
Weight	30.5 Kg / 67.2 lbs	30.3 Kg / 66.8 lbs	33.3 Kg / 73.41 lbs	36 Kg / 79.37 lbs	47.3 Kg / 104.3 lbs



Contact SAMSUNG WORLD-WIDE

If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care center.

Country	Customer Care Center ☎	Web Site
ARGENTINE	0800-333-3733	www.samsung.com/ar
BRAZIL	0800-124-421	www.samsung.com/br
CHILE	800-726-7864 (SAMSUNG)	www.samsung.com/cl
COSTA RICA	0-800-507-7267	www.samsung.com/latin
ECUADOR	1-800-10-7267	www.samsung.com/latin
EL SALVADOR	800-6225	www.samsung.com/latin
GUATEMALA	1-800-299-0013	www.samsung.com/latin
JAMAICA	1-800-234-7267	www.samsung.com/latin
MEXICO	01-800-SAMSUNG (7267864)	www.samsung.com/mx
PANAMA	800-7267	www.samsung.com/latin
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REP. DOMINICA	1-800-751-2676	www.samsung.com/latin
TRINIDAD & TOBAGO	1-800-7267-864	www.samsung.com/latin
VENEZUELA	1-800-100-5303	www.samsung.com/latin
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